



Chapter  
**1**

# Assessment Guide <sup>for</sup> Educators

A guide to the 2014 assessment content from GED Testing Service

July 2014 | Update

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# What's New in Chapter 1

The intent of this guide is to help you better understand the 2014 GED® test. Please use this page to obtain an overview of the updates that have been made before diving deeper into the guide.

The Assessment Guide for Educators provides adult education professionals key information about the upcoming 2014 GED® test. Since publishing the first version of the guide earlier in 2012, GED Testing Service has received questions and feedback from the field. This chapter contains no new changes since the November 2012 update.

# Assessment Guide for Educators Overview

## Introduction

In 2014, GED Testing Service will unveil a new assessment that ensures the GED® testing program is no longer an endpoint for adults, but rather a springboard for further education, training, and better paying jobs. Four content-area assessments—Reasoning Through Language Arts (RLA), Mathematical Reasoning, Science, and Social Studies—will measure a foundational core of knowledge and skills, and an additional performance level will certify that adults are ready for college and careers.

The *Assessment Guide for Educators* is a frontline resource that helps adult educators and administrators better understand the content of the new assessment. This guide is used to highlight the new assessment’s item types, assessment targets, guidelines for how items will be scored, and much more.

## Continuing the Tradition of Opportunity

The new assessment system will continue to provide adults the opportunity to earn a high school credential, as it’s done since 1942. It will measure career- and college-readiness skills that are not only the focus of today’s curriculum, but are also needed for success in both workforce and college programs.

But it doesn’t stop there. GED Testing Service is taking a significant leap forward in score reporting. The enhanced score report will provide a profile of scores that gives information about test-taker strengths and areas of developmental need with each test content area. This more detailed scoring will benefit test-takers, teachers, colleges, and employers.

In addition, GED Testing Service has added the opportunity for adults to demonstrate their readiness for workplace and college programs through a new, additional endorsement that can be added to a test-taker’s high school credential.

Today’s world is dramatically different than when GED Testing Service introduced the 2002 test. Adults want opportunities

“The *Assessment Guide for Educators* is a frontline resource that helps adult educators and administrators better understand the content of the new assessment.”



Find more information about the new

assessment in chapters two and three of the *Assessment Guide for Educators*:

- Depth of Knowledge summary
- Assessment targets
- Passage exemplars
- Passage selection specs
- Scoring rubrics
- Reporting category descriptors
- Much more

for better paying jobs, and ways to support their families. The new assessment, and its associated parts, will help adults better demonstrate those skills and abilities sought by both employers and colleges.

### Definition of Readiness

GED Testing Service has worked closely with various consulting groups, organizations, and representatives from K-12, two-year and four-year institutions, and the employment sector in order to shape the Assessment Targets for the new assessment. The new assessment targets are derived from career- and college-readiness standards like those in place in Texas and Virginia. The new Assessment Targets are informed by research that suggests a clear and elegant set of essential skills necessary for success in a credit-bearing postsecondary course, as well as in job training programs. The targets are:

- Clear, understandable, and consistent
- Include rigorous content and require applications of knowledge through a range of levels of cognitive complexity
- Based on evidence

### The Bottom Line

A GED® test-passer must remain competitive with students who complete their high school credentials in the traditional manner. As the education community embraces CCRS, the new assessment from GED Testing Service will meet the market’s demand for test-takers to be able to demonstrate these high-level skills.

National Curriculum Survey evidence suggests that test-takers who demonstrate fluency with the skills measured in the new assessment will be better prepared for what they plan to do with their lives. A graduate will no longer hold a high-school equivalency credential, but a roadmap for life’s success. The GED® testing program will fulfill its promise to be a stepping-stone toward a college classroom or a better career and a family sustaining wage.



[Read more about the Texas College- and Career-Readiness Standards \(PDF\)](#)



[Read more about the Virginia Standards of Learning.](#)

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“A GED® test-passer must remain competitive with students who complete their high school credentials in the traditional manner.”

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“As the education community embraces CCRS, the new assessment from GED Testing Service will meet the market’s demand for test-takers to be able to demonstrate these high-level skills.”

# Item Types Across Content Areas

The variety of item types available for use on the GED® test is larger now, thanks to computer-based testing. The computer-based testing platform gives the opportunity to use interactive item types that are not possible on a pencil-and-paper test. Each content area test features an assortment of item types listed below, some that already appear on the 2002 Series GED® Test and others that are new.

## Item Types in Reasoning Through Language Arts

The GED® RLA Test on the new assessment will be composed of several passage sets. Each passage set will include text ranging from 400-900 words and six to eight items (See *Chapter Three: Passage Requirement Synopsis* for more detailed information on RLA passages). The RLA Test will feature:

- Multiple choice items
- Short answer items
- Several different types of technology-enhanced items
- Drop-down items embedded in passages
- One 45-minute extended response item

These items assess the full depth and breadth of skills outlined in the GED® RLA Assessment Targets. Test-takers can apply different cognitive strategies with the wide variety of item types, demonstrating proficiency with the RLA content. This allows GED Testing Service to assess the targeted content at a number of Depth of Knowledge (DOK) levels (See *Chapter Two: Depth of Knowledge Summary* for more information).

See below for an overview of the types of items found on the GED® RLA Test.

**Multiple choice (MC)** items will be used to assess aspects of virtually every indicator listed in the GED® RLA Assessment Targets. This item type continues to be a reliable

“The computer-based testing platform gives the opportunity to use interactive item types that are not possible on a pencil-and-paper test.”



Learn more about the advantages of offering the GED® test on computer. Visit [www.GEDcbt.org](http://www.GEDcbt.org).



method for measuring skills and knowledge at a range of cognitive levels in a standardized manner. Unlike the multiple choice items on the 2002 Series GED® Test, the MC on the new assessment will only have four answer options, rather than five. This is the only content-area test that each MC item refers to a passage.

**Fill-in-the-blank (FIB)** items can also be used to measure a wide range of skills identified in the GED® RLA Assessment Targets. In particular, they may provide the unique opportunity to assess vocabulary skills at a higher cognitive level than MC items might by requiring test-takers to supply their own synonyms, rather than choosing from four options. Fill-in-the-blank items can also function like brief, easily scored short answer items (see below) that require test-takers to create a short phrase or complete a sentence in order to analyze a text feature within a passage.

**Drag-and-drop** items are interactive tasks that require test-takers to move small images, words, or short phrases to designated drop targets on a computer screen. They are often used to assess a test-taker’s ability to classify and appropriately sequence information. For example, a drag-and-drop task might require test-takers to order events in a passage on the basis of chronology or cause and effect. They may also provide opportunities for test-takers to analyze an author’s arguments by classifying the arguments as true or false. These items may employ a variety of different graphic representations, including Venn diagrams, timelines, and many others. Another way the new GED® assessment may employ the drag-and-drop technology is in editing tasks that require test-takers to reorder paragraphs within a passage or sentences within a paragraph.

**Drop-down** items are items with multiple response options embedded directly within a text. On the RLA Test, this item type will be used primarily to assess the language skills, such as conventions of Edited American English, standard usage, and punctuation, outlined in the GED® RLA Assessment Targets. These items are designed to mimic the editing process as authentically as possible; therefore, variations of a phrase will appear as options in drop-down menus within the text. Once the test-taker selects an option, the answer will show on the screen as part of the text.



**Indicator:**  
Fine-grained descriptions of specific skills that will be assessed in individual test items. (See *Chapter Two: Assessment Targets* for more detail.)

**Extended response (ER)** items on the RLA Test will be 45-minute tasks that require test-takers to analyze one or more source texts in order to produce a writing sample. The source texts will not exceed 650 words. These ERs will be scored on three dimensions as outlined in the Extended Response Multi-trait Scoring Rubric (found in Chapter Three). The first trait on the rubric pertains to how well test-takers analyze arguments and gather evidence found in source texts in support of the positions that they take in their writing samples. The second trait scores the writing samples on the basis of how well the writing is developed and organized. The writing samples are also scored for how well test-takers demonstrate fluency with conventions of Edited American English, per the third trait on the rubric. Each of these three traits will be scored on a four-point scale. The prompts for the ERs will be developed to elicit analytic writing that effectively uses evidence from the source text(s). For more information on how the ERs will be scored, see the *Chapter Three: Extended Response Scoring Rubrics*.

### Item Types in Mathematical Reasoning

The new GED® Mathematical Reasoning Test will feature:

- Multiple choice items
- A variety of technology-enhanced item types
- Drop-down items

These items assess the full depth and breadth of skills outlined in the GED® Mathematics Assessment Targets. Employing a wide variety of item types should also allow us to assess the targeted content at a number of Depth of Knowledge (DOK) levels, as they each provide opportunities for test-takers to apply different cognitive strategies to demonstrate proficiency with Mathematics Test content (See *Chapter Two: Depth of Knowledge Summary* for more information). Each item type on the Mathematics test may be presented either as a discrete item or as part of an item scenario in which two or three items pertain to a single stimulus. Stimulus materials may include brief text, graphs, tables, or other graphic representations of numeric, geometric, statistical, or algebraic concepts.



#### Drop-down item:

Drop-down items contain response opportunities embedded directly within a text. The new GED® assessment will employ this item type primarily to assess language skills in tasks designed to mimic the editing process in an authentic manner. The items will present a brief text with three to six drop-down menus embedded within. The drop-down menus will contain several answer options which, when selected, will appear within the text itself.

**Multiple choice (MC)** items will be used to assess aspects of virtually every indicator listed in the GED® Mathematics Assessment Targets. This item type continues to be a reliable, standardized method for measuring skills and knowledge at a range of cognitive levels. Unlike the multiple choice items on the 2002 Series GED® Test, the MC on the new assessment will only have four answer options, rather than five.

**Fill-in-the-blank (FIB)** functionality on the Mathematics Test gives the test-taker the opportunity to type in the numerical answer to a problem or to enter an equation using keyboard symbols or the character selector. Another use for fill-in-the-blank items might be to allow test-takers to express a one-word or short phrase answer to questions about mathematical reasoning.

**Drop-down** items with drop-down menu functionality will be used to give test-takers opportunities to choose the correct math vocabulary or numerical value to complete statements. As with editing tasks in the RLA Test, the test-taker is given the advantage of seeing the complete statements on screen in an authentic way. Drop-down items are frequently also used to make comparisons between two quantities. In the example below, the comparative terms would populate the drop-down menu.

$\sqrt{71}$  is      greater than  
                  equal to       $8^2$   
                  less than

**Hot spot** items consist of a graphic image with virtual “sensors” placed strategically within the image. This item type can be used to measure skills with regard to plotting points on coordinate grids, on number lines, or on dot plots. Test-takers can also select numbers or figures that have a particular characteristic or create models that match given criteria (e.g. given a three-dimensional figure, the test-taker could select its edge or create a model of two-thirds of a rectangle divided into 15 sections). Hot spot items create a much more authentic experience for test-takers because they provide opportunities for test-takers to navigate within a two-dimensional field to demonstrate their proficiency with a variety of quantitative, algebraic, and geometric skills.

“Employing a wide variety of item types should also allow us to assess the targeted content at a number of Depth of Knowledge (DOK) levels.”



**Depth of Knowledge (DOK)**

is a model used to analyze a wide range of curricular materials and assessments (both large scale and classroom) “on the basis of the cognitive demands required to produce an acceptable response.”

Source: [http://www.aps.edu/rda/documents/resources/Webbs\\_DOK\\_Guide.pdf](http://www.aps.edu/rda/documents/resources/Webbs_DOK_Guide.pdf)

**Drag-and-drop** items are interactive tasks that require test-takers to move small images, words, or numerical expressions to designated drop targets on a computer screen. They can be used to create expressions, equations, and inequalities by dragging numbers, operators, and variables into boxes that form an equation. Drag-and-drop items can also be employed in the service of demonstrating classification and sorting skills as they provide an opportunity for test-takers to organize data based on a set of characteristics. The test-taker can also order steps in a process or solution or match items from two sets.

### Item Types in Science

The new GED® Science Test will feature:

- Multiple choice items
- Short answer items
- A variety of technology-enhanced items
- Drop-down items

These items assess the full depth and breadth of skills outlined in the GED® Science Assessment Targets. Employing this variety of item types should also allow us to assess the targeted content at a number of Depth of Knowledge (DOK) levels. Each item type provides opportunities for test-takers to apply different cognitive strategies to demonstrate proficiency with Science practices and content knowledge (See *Chapter Two: Depth of Knowledge Summary* for more information). Each item type on the Science Test may be presented either as a discrete item or as part of an item scenario in which two or three items pertain to a single stimulus. Stimulus materials may include brief text, graphs, tables, or other graphic representations of data or scientific concepts. Many of the Science Test stimuli will pertain to the focusing themes of “Human Health and Living Systems” and “Energy and Related Systems” as identified in the GED® Science Assessment Targets. (See *Chapter Two: Assessment Targets: Science* for more information)

**Multiple choice (MC)** items will be used to assess aspects of virtually every Science Practice and Content Topic listed in the GED® Science Assessment Targets. This

item type continues to be a reliable, standardized method for measuring skills and knowledge at a range of cognitive levels. Unlike the multiple choice items on the 2002 Series GED® Test, the MC on the new assessment will only have four answer options, rather than five.

**Fill-in-the-blank (FIB)** functionality on the Science Test gives a test-taker the opportunity to type in the correct response when potential answers have little variability. For example, this item type can be used when an item calls for a response to a specific calculation or when the test-taker is required to excerpt a word or phrase from a text to demonstrate understanding of an idea or vocabulary term. More specifically, a particular item measuring data interpretation skills in a science context could call for a single word or short phrase to describe a trend on a graph.

**Drop-down** items with drop-down menu functionality embedded within a brief text will be used to give test-takers opportunities to choose the correct response to complete statements. As with editing tasks in the RLA Test, test-takers are given the advantage of seeing the complete statements they create in an interactive manner on screen. These items can measure many of the same skills that fill-in-the-blank items can, though they provide a selection of possible responses from which test-takers can choose.

**Drag-and-drop** items are another type of interactive task that require test-takers to move small images, words, or numerical expressions to designated drop targets on a computer screen. On the Science Test, this item type can be used to measure a test-taker’s skills with regard to assembling data or comparing and classifying information. For instance, an item could ask test-takers to place organisms in specific locations on a food web. Other examples of tasks well-suited to drag-and-drop items might be ones in which test-takers place labels on a graph or chart, fill in a Venn diagram with data from a brief textual stimulus, order steps in a scientific experiment, or place data points from a given context into a chart, table, or graphical model.

**Hot spot** items consist of a graphic image with virtual “sensors” placed strategically within the image. They can be used to measure a test-taker’s understanding of relationships between data points cited from a textual or graphic stimulus. For example, a hot spot item could contain



**Science Practice and Content**

**Topic:** The Science Assessment Targets and Social Studies Assessment Targets are broken into a two-ply system. The top layer is the *practices* and the second layer is the *content topics*. Every item will be aligned to one practice and one content topic.

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“Many of the Science Test stimuli will pertain to the focusing themes of “Human Health and Living Systems” and “Energy and Related Systems” as identified in the GED® Science Assessment Targets.”

a pedigree chart requiring test-takers to select offspring with a particular trait in order demonstrate their understanding of heredity. Other items might ask test-takers to select data or points in a graph, chart, or table that support or refute a given conclusion or to select parts of a specific model given some selection criteria (e.g. a model of the human body, a cladogram, or a matter-cycle diagram).

**Short answer (SA)** items provide opportunities for test-takers to demonstrate a wide range of cognitive strategies as they compose their own brief responses to the wide range of content outlined in the GED® Science Assessment Targets. This item type could be employed to determine whether a test-taker can provide a valid summary of a passage or model, create and successfully communicate a valid conclusion or hypothesis, or derive evidence from a textual or graphic stimulus that specifically and accurately supports a particular conclusion.

### Item Types in Social Studies

The new GED Social Studies Test will feature:

- Multiple choice items
- A variety of technology-enhanced items
- Drop-down items
- One 25-minute extended response item

These items assess the full depth and breadth of skills outlined in the GED® Social Studies Assessment Targets. Employing this variety of item types should also allow us to assess the targeted content at a number of Depth of Knowledge (DOK) levels, as they each provide opportunities for test-takers to apply different cognitive strategies and demonstrate proficiency with social studies content (See *Chapter Two: Depth of Knowledge Summary* for more information). Each item type on the Social Studies Test may be presented either as a discrete item or as part of an item scenario in which two or three items pertain to a single stimulus.

Stimulus materials may include brief text, maps, graphs, tables, or other graphic representations of data or scientific

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“On the Science Test, drag-and-drop item types can be used to measure a test-taker’s skills with regard to assembling data or comparing and classifying information.”

concepts. Many of the brief texts featured in both discrete items and item scenarios will be drawn from texts reflecting “the Great American Conversation.” These texts may be directly excerpted from founding documents, such as The Bill of Rights, or they may contain analyses of these documents. They may also be drawn from other more contemporary primary and secondary source documents (e.g. political speeches and commentary) that convey important concepts about American civics.

**Multiple choice (MC)** items will be used to assess aspects of virtually every Social Studies Practice and Content Topic listed in the GED® Social Studies Assessment Targets. This item type continues to be a reliable, standardized method for measuring skills and knowledge at a range of cognitive levels. Unlike the multiple choice items on the 2002 Series GED® Test, the MC on the new assessment will only have four answer options, rather than five.

**Fill-in-the-blank (FIB)** items on the Social Studies Test give test-takers the opportunity to construct a very brief response, like a single word or a short phrase, when potential answers have little variability. For example, this item type can be used when an item requires a test-taker to identify a particular data point on a chart reflecting economic trends. It can also be used to excerpt a word or phrase from a text to demonstrate understanding of an idea or vocabulary term that could be inferred from a brief textual stimulus.

**Drop-down** items with drop-down menu functionality embedded within a brief text will be used to give test-takers opportunities to choose the correct response to complete statements. As with editing tasks in the RLA Test, test-takers are given the advantage of seeing the complete statements they create in an interactive manner on screen. These items can measure many of the same skills that fill-in-the-blank items can, though they provide a selection of possible responses from which test-takers can choose. This item type is especially effective for the purposes of assessing how well a test-taker can identify a logical conclusion drawn from text-based evidence or even make a generalization based on an author’s argument.

**Drag-and-drop** items are another type of interactive task that require test-takers to move small images, words, or numerical expressions to designated drop targets on a



**Social Studies Practice**

**and Content Topic:**

The Social Studies Assessment Targets and Science Assessment Targets are broken into a two-ply system. The top layer is the practices and the second layer is the content topics. Every item will be aligned to one practice and one content topic.

“Many of the brief texts featured in both discrete items and item scenarios will be drawn from texts reflecting ‘the Great American Conversation.’ ”

computer screen. They may be used to assess how well a test-taker can make comparisons between concepts or representations of data or how well they classify or order information. For example, an individual drag-and-drop item may require a test-taker to place labels on a map to indicate important commodities produced in various regions. Other items might provide the test-taker an opportunity to place data points or labels drawn from a brief text onto a graph or chart.

**Hot spot** items consist of a graphic image with virtual “sensors” placed strategically within the image. They can be used to measure a test-taker’s understanding of relationships between data points cited from a textual or graphic stimulus. They are also particularly effective for measuring a test-taker’s ability to understand geographic concepts with regard to mapping. Other applications of hot-spot functionality might include asking test-takers to select data or points in a graph, chart, or table that support or refute a given conclusion stated in a brief textual stimulus.

**Extended response (ER)** items on the Social Studies Test will be 25-minute tasks that will require test-takers to analyze one or more source texts in order to produce a writing sample. These ERs will be scored on three dimensions as outlined in the Extended Response Multi-trait Scoring Rubric. The first trait on the rubric pertains to how well test-takers analyze arguments and gather evidence from the source text in support of the positions that they take in their writing samples. The second trait scores the writing samples on the basis of how well the writing is developed and organized. The writing samples are also scored for how well test-takers demonstrate fluency with conventions of Edited American English, per the third trait on the rubric. On the Social Studies Test, the first trait of the rubric will be scored on a three-point scale, and the second and third traits will each be scored on a two-point scale. The prompts for the ERs will be developed to elicit analytic writing that effectively uses evidence from the source text(s). For more information on how ERs will be scored, see the *Chapter Three: Extended Response Scoring Rubrics*.



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“Unlike the multiple choice items on the 2002 Series GED® Test, the MC on the new assessment will only have four answer options, rather than five.”



# Item Layouts

Item layouts are shown to highlight the structure of each item type described in the previous section. The content in the item layouts is not representative of the new GED® assessment and consists of placeholder copy.

## Hot Spot Item (split screen)

This item layout shows a brief stimulus placed in a split screen with a number line graphic. The graphic contains one or more “sensor” regions, or hot spots, on which the test-takers can click in order to provide responses to the question. In this example, the green circles represent the test-taker’s answer to this item.

GED Layouts - Candidate NameQuestion 2 of 13 (5050hotspot)

CommentFlag for Review

A teacher conducted an experiment in which he asked students questions about their reading assignment. The table shows the number of questions each student answered correctly.

Student	Number of Questions Answered Correctly
Jada	6
Harry	4
Dana	2
Tim	6
Patrick	3
Anita	2
Sara	1
Ruben	4
Kevin	5
Chip	2

The teacher made a dot plot of the data from the experiment. Complete the dot plot by adding the data for Ruben, Kevin, and Chip.

Click above the number line to plot the points.

### Experiment Data

Number of Questions Answered Correctly

← Previous Next →

### Drag-and-drop Item (split screen)

This example shows three drag tokens (the yellow stars) placed on the drop target (the chart on the right). In items that use this layout, the appearance and number of the drag tokens and the drop targets may vary, but all drag-and-drop items allow test-takers to interact with the material as they move objects around on the screen.

GED Layouts - Candidate Name Question 1 of 13 (5050DND)

[Comment](#) [Flag for Review](#)

A teacher conducted an experiment in which he asked students questions about their reading assignment. The table shows the number of questions each student answered correctly.

Student	Number of Questions Answered Correctly
Jada	6
Harry	4
Dana	2
Tim	6
Patrick	3
Anita	2
Sara	1
Ruben	4
Kevin	5
Chip	2

The teacher made a chart and put a gold star beside the name of each student who answered 5 or 6 questions correctly. Which students have a gold star beside their names?

Drag the star into the box next to the name of each student who earned a gold star.

Jada	★	Anita	
Harry		Sara	
Dana		Ruben	
Tim	★	Kevin	★
Patrick		Chip	

★

[Next →](#)

### Short Answer Box

This item layout will be used primarily on the Science Test and will require test-takers to answer one or more questions in a brief written paragraph.

GED Layouts - Candidate Name Question 3 of 13 (CR\_essay)

[Comment](#) [Flag for Review](#)

What are some features a geologist might examine to determine the composition of a rock sample? What might these features tell the scientist about this particular rock?

Type your answer in the box.

Cut Copy Paste Undo Redo

Word Count : 0 Character Count : 0

[← Previous](#) [Next →](#)

### Passage and Response Box (split screen)

This item layout will be used to display both brief short answer (SA) items and longer extended response (ER) items. When used for SA items, the item will appear on the Science Test. When used for ER items, the item will appear on the RLA and Social Studies tests. Pages in passages will be tabbed so that test-takers can easily page through longer texts. Also, the question or prompt and instructions will be visible to test-takers as they read the passage.

The screenshot displays a GED test interface with a split-screen layout. The top header shows 'GED Layouts - Candidate Name' on the left and 'Question 6 of 15 (CR\_essayP3)' on the right. Below the header is a 'Comment' button and a 'Flag for Review' button. The left pane shows 'Page 1' and 'Page 2' tabs, with 'Page 1' selected. The passage title is 'Sinbad's First Voyage'. The passage text is as follows:

**Sinbad's First Voyage**

In our voyage we touched at several islands, where we sold or exchanged our goods. One day, whilst under sail, we were becalmed near a small island, but little elevated above the level of the water, and resembling a green meadow. The captain ordered his sails to be furled, and permitted such persons as were so inclined to land. But while we were recovering ourselves from the fatigue of the sea, the island on a sudden trembled, and shook us terribly.

The motion was perceived on board the ship, and we were called upon to embark speedily, or we should all be lost, for what we took for an island proved to be the back of a sea monster. The nimblest got into the sloop, others betook themselves to swimming; but for myself, I was still upon the back of the creature when he dived into the sea, and I had time only to catch hold of a piece of wood that we had brought out of the ship. The captain, having received those on board who were in the sloop, resolved to improve the favorable wind that had just risen, and hoisting his sails, pursued his voyage, so that it was impossible for me to return to the ship.

Thus was I exposed to the mercy of the waves all the rest of the day and the following night. The bank was high and rugged; so that I could scarcely have got up, had it not been for some roots of trees, which chance placed within reach. Having gained the land, I lay down upon the ground, until the sun appeared. Then, though I was very feeble, both from hard labor and want of food, I crept along to find some herbs fit to eat, and had the good luck not only to procure some, but likewise to discover a spring of excellent water, which contributed much to recover me. After this I advanced farther into the island, where at a great distance I perceived some horses feeding. I went toward them, and as I approached heard the voice of a man, who immediately appeared, and asked me who I was. I related to him my adventure, after which he led me into a cave.

The right pane contains the question prompt: 'Type your answer in the box. Describe some of the difficulties Sinbad faces on his first voyage. Include details from the story for support.' Below the prompt is a text entry area with a toolbar containing 'Copy', 'Paste', 'Undo', and 'Redo' buttons. At the bottom of the text area, it shows 'Word Count : 0' and 'Character Count : 0'. The bottom navigation bar includes 'Previous' and 'Next' buttons.

### Short Answer/Fill-in-the-blank Combination Item

This item type will be used on the Science Test. When test-takers are required to answer multiple-part questions using their own language, this item layout provides scaffolding to help guide test-takers to respond to all parts of the item.

GED Layouts - Candidate Name Question 5 of 13 (CR\_FIB)

[Comment](#) [Flag for Review](#)

Type your answers in the boxes.

A baseball mass is 0.145 kilograms. The baseball is thrown at 40.6 meters per second.

What is the kinetic energy (in joules) of the baseball?

$$E_k = \frac{1}{2} \cdot m \cdot v^2$$

joules

Describe why a small change in the velocity of the baseball can have a greater impact on the kinetic energy than a small change in the mass of the baseball. How will the kinetic energy of any object change if the mass is doubled? How will the kinetic energy of any object change if the velocity is doubled?

⌂ Cut Copy Paste Undo Redo

Word Count : 0

[← Previous](#) [Next →](#)

## Fill-in-the-blank Item with Single Blank and an Embedded Response

This item type requires test-takers to fill in a single blank.

GED Layouts - Candidate Name Question 6 of 15 (FIB1)

[Comment](#) [Flag for Review](#)

Type your answer in the box.

A box contains 125 pencils. Twenty-five of the pencils are sharpened. Twenty-five is  percent of 125.

[← Previous](#) [Next →](#)

## Fill-in-the-blank Closed Stem Item with Single Blank

This item type requires test-takers to fill in a single blank.

GED Layouts - Candidate Name Question 9 of 15 (FB3)

[Comment](#) [Flag for Review](#)

Type your answer in the box.

What is the product of 3.25 and 10?

## Fill-in-the-blank Item with Multiple Blanks and Embedded Responses

This item type requires test-takers to fill in multiple blanks.

GED Layouts - Candidate Name Question 10 of 15 (FIB1\_Multipleblanks)

[Comment](#) [Flag for Review](#)

Type your answers in the boxes.

A bag contains 12 marbles that are black, green, or white. The probability of randomly picking a green marble is  $\frac{1}{3}$ . The probability of randomly picking a white marble is 50%. The bag contains 6  marbles, 4  marbles and 2  marbles.

[← Previous](#) [Next →](#)



## Fill-in-the-blank Closed Stem Item with Multiple Blanks

This item type requires test-takers to fill in multiple blanks.

GED Layouts - Candidate Name Question 12 of 15 (Fill-in-the-blank)

[Comment](#) [Flag for Review](#)

Type your answers in the boxes.

A breeder of rabbits is examining the genetics of rabbit coat color. Research shows that black (C) is dominant to all other colors. Chinchilla (c<sup>s</sup>) is dominant to Himalayan and albino. Himalayan (c<sup>h</sup>) is dominant to albino. Albino (c) is recessive.

A homozygous black rabbit mates with a homozygous chinchilla rabbit. What is the likelihood that each offspring will be a certain color?

black  %

chinchilla  %

Himalayan  %

albino  %

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### Multiple Choice Item and a Passage (split screen)

This layout will appear primarily on the RLA Test. However, item scenarios in which two or three items pertain to a single, brief text or graphic stimulus will appear in a similar format on the Mathematics, Science and Social Studies tests.

GED Layouts - Candidate Name Question 11 of 15 (MCsplit)

[Comment](#) [Flag for Review](#)

Spain has opened the first 24-hour industrial scale solar thermal plant.

The concept is very different from what most people think of as solar power. Most people think of solar panels. These produce electricity by exciting a compound with sunlight and that excited compound causes electrons to flow, producing electricity. This process is called photovoltaics.

Solar thermal is very different. By concentrating the sunlight reflecting off thousands of mirrors onto a small area results in that area getting very, very hot. By capturing and storing that heat, the facility can use the heat to boil water, producing steam and generating electricity using standard steam turbines.

This has several advantages over photovoltaics. The first is simplicity. Steam driven turbines are a well understood technology. People trained in energy production from other sources (coal, gas, and nuclear) can transfer their skills. Also, the sunlit part is only mirrors, not solar panels or other high-tech system, just simple mirrors.

Second, the system generates a lot of heat. In reality, every energy system in use today is based around capturing the work done by flowing heat energy. Basically, heat moves from hot things to cold things until they are the same temperature. Work is done by capturing that flow of heat and transforming some of it into a different form of energy (electricity or the motion of cars). The greater the temperature difference, the better for capturing the energy.

Third, it is possible to store heat. That is the real trick to this system. It uses a salt (not table salt, a chemical salt) that is heated to the melting point by the solar mirrors. The salt is the heat storage system. Since the salts used (potassium nitrate and sodium nitrate) melt between 304°C and 334°C (that is 579°F and 633°F) they can turn water into very high pressure steam easily.

These salts also retain that heat very well. This Spanish system is rated for electricity production for 15 hours even without any sunlight. It retains up to 99% of its heat after 24 hours if not used for electricity. To see all the system's

From the information given, which statement describes an advantage of solar thermal power plants for developing countries?

- A. Many developing countries are near the ocean and have a ready supply of salt for use in a solar thermal plant.
- B. Solar thermal plants can store heat for long periods of time, so developing countries have a constant supply of power.
- C. Many developing countries are in warm climates and a solar thermal plant can generate more electricity when it is hot.
- D. Solar thermal plants are relatively simple, so developing countries do not have to have a complex infrastructure to build this kind of plant.

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## Drop-down Item

In this item type, test-takers will choose their answers from a drop-down menu that will appear embedded within text. This item layout will be applied to editing items within the RLA Test and will also appear on the other content area tests.

GED Layouts - Candidate Name Question 11 of 13 (multiDDsample)

[Comment](#) [Flag for Review](#)

A solar system contains many types of objects, called bodies. The most massive is the central  which contains hydrogen undergoing . Smaller bodies, called , orbit the central body. These smaller bodies may or may not have smaller objects, called , orbiting them.

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# About the Item Samplers

## Description

In order to help educators and other stakeholders better understand how the 2014 GED® test Assessment Targets will be reflected in test items, GED Testing Service has prepared Item Samplers for each content area test. The Item Samplers are available on the GED Testing Service web site at [GEDtestingservice.com/itemsampler](http://GEDtestingservice.com/itemsampler) in three formats:

1. An interactive version for viewing on the web
2. An interactive version for download and viewing on your computer at any time
3. A PDF version designed for users who want or need a paper-based view of the Item Samplers

## Purpose

The Item Samplers serve several purposes.

First, the Item Samplers provide users with examples of test items that represent the full range of item types that will appear on each content-area test in the 2014 GED® test. For example, the Reasoning through Language Arts (RLA) Item Sampler includes items that demonstrate how the various item types will appear in the context of that content-area test. Because short answer items will no longer appear on the RLA exam in order to minimize testing time, the Item Sampler for RLA no longer includes an item type in that category.

Second, the Item Samplers show how some of the 2014 GED® test Assessment Targets can be translated into test items. By examining the Answer Explanation tab for each item, a user can see what Assessment Target is being measured by the item, then trace the target back to the instructional career- and college-readiness standard that is being measured.

Finally, the interactive versions of the Item Samplers provide the look, feel, and core functionality of the testing interface

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“The Reasoning through Language Arts (RLA) Item Sampler includes items that demonstrate how multiple choice items, drop-down items, extended response items, and so on will appear in the context of that content-area test.”

that test-takers will see when they take the 2014 GED® test on computer. It should be noted that the Item Samplers are built with different software than the 2014 GED® test, so although they have the essential functionality, look, and feel of the test, the actual test will contain additional functionality that is not present in the Item Samplers, such as support for accommodations, a functioning on-screen calculator, and so on. Of course, the Item Samplers also contain functionality that will not appear on the actual 2014 GED® test, such as the Answer Rationale button.

### Cautions on Interpretation

Users of the Item Samplers are cautioned **not** to make inferences about the 2014 GED® test based solely on the Item Samplers.

First, the Item Samplers are **not** intended to demonstrate the full range of difficulty of the 2014 GED® test. The original July 2012 Item Samplers were published prior to the 2012 GED Testing Service Field Test, in which items that will appear on the actual 2014 GED® test are systematically administered to candidates to determine their difficulty and ability to discriminate performance among test-takers of varying skill levels. Because of this, the items in the samplers should not be interpreted by users as representative of the full range of item difficulty on the 2014 GED® test.

Second, because the Item Samplers are intended to provide examples of all the different items types that can appear on each content area test, the samplers do **not** reflect the actual distribution of items across the various item types. Multiple choice items will still represent the majority of items on each content area test. As multiple choice is such a familiar item type to educators and test-takers, fewer of those items have been included in the Item Samplers.

Finally, as a result of field testing conducted in the summer of 2012, the revised November 2012 publication of the Item Samplers now includes 16 additional multiple choice items (four items in each content area) that have been field-tested and that:

- 1. Reflect the 2014 GED® test Assessment Targets



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“The Item Samplers are **not** intended to demonstrate the full range of difficulty of the 2014 GED® test.”

- 2. Show additional examples of multiple choice items, and;
- 3. Provide sample items that are easier to more moderate in difficulty, thereby depicting items that are more representative of the range represented on the 2014 test.

In short, the Item Samplers are a convenient way to demonstrate all of the item types and functionality, but the samplers are not fully representative of content or difficulty of the 2014 GED® test. The Item Samplers’ purpose is simply to show which item types would be employed in each content area.



# Establishing the Performance Standard on the 2014 GED® Test

## Overview

Since the inception of the GED® testing program in the 1940s, the key purpose of the GED® test has been to provide an opportunity for adults who did not complete a formal high school program to certify their attainment of high school-level academic knowledge and skills in order to earn their jurisdiction’s high school-equivalency credential. The 2014 GED® test will continue this core purpose. Although the content of the new test will be based on career- and college-ready content standards, the passing standard—the score on each content area test that a test-taker must achieve in order to demonstrate the level of performance deemed necessary to receive a high school equivalency credential—will be tied to the performance on the 2014 GED® test of graduating high school students who will be receiving their diplomas in spring 2013.

“Although the content of the new test will be based on career- and college-ready content standards, the passing standard will be tied to the performance on the 2014 GED® test of graduating high school students who will be receiving their diplomas in spring 2013.”

## Standardization and Norming

In order to allow adults the opportunity to demonstrate their knowledge and skills are comparable to that of high school graduates, the score scales for the 2014 GED® test will be referenced to the performance of graduating high school seniors on the same tests that will be used beginning in January 2014. This referencing of the 2014 GED® test score scales to a nationally representative group of graduating high school seniors is often referred to as “norming.” The 2014 Series GED® test will be standardized and normed using a nationally representative sample of 2013 graduating seniors who will take the 2014 GED® test in July 2013.

## Benefits of Career- and College-Ready Content and Norm-Referenced Passing Standard

Basing the content of the 2014 GED® test on career- and college-ready standards while still tying the passing standard to the performance of 2013 high school graduates provides significant benefits. First, tying the passing standard on the GED® test to empirical performance data means that adults

who are seeking a high school-equivalency credential will be able to earn one in 2014 and beyond even though they have not necessarily received instruction in the full range, depth, and breadth of content that is covered by career- and college-ready content standards. Although high school graduation requirements are likely to become more rigorous in the K-12 systems across the country once career- and college-ready curriculum becomes the norm in public education, this increase in rigor is likely to take a number of years to take effect. GED Testing Service will be monitoring the public education environment and is committed to revising the passing standard through a new norming study within several years.

Second, measuring performance of adults on career- and college-ready content means that the score reporting that is available to test-takers and other key stakeholders can provide information on actual career- and college-readiness knowledge and skills that test-takers are exhibiting on the GED® test. Because these skills are increasingly important in a wide range of jobs, careers, and postsecondary certificate and credential programs, this skills information will be valuable in helping test-takers chart their course forward.

Test-takers will receive informative performance feedback regarding the content knowledge and skills they have demonstrated on the 2014 GED® test. GED Testing Service and other experts will examine how the test content aligns with the score scale to identify specific, reportable scoring zones. Test-takers will receive feedback on the knowledge and skills associated with performance within that zone. Identifying this content knowledge and skills will be important in order to provide feedback and information to test-takers on how they are progressing toward career and college readiness, and what actions they might need to take to improve their skills going forward.

Finally, these reporting zones that measure progress toward career and college readiness will have future benefits. As appropriate longitudinal data can be collected, and with the involvement of higher education institutions, GED Testing Service will conduct targeted research studies that will provide empirical evidence to support a GED® test career and college indicator. When available, this indicator will identify a level of performance that would ultimately allow test-takers

“Although high school graduation requirements are likely to become more rigorous in the K-12 systems across the country once career- and college-ready curriculum becomes the norm in public education, the increase in rigor is likely to take a number of years to take effect.”



to enroll directly in credit-bearing postsecondary education courses without having to complete developmental education courses.

### Involvement of Higher Education in Performance Zone Identification

GED Testing Service is seeking the advice and support of the higher education community in helping to define the reporting zones on the new GED® test. The involvement of higher education institutions in the process of identifying performance zones in each content area is critical to the success of the new GED® assessment program. Because information to test-takers and other stakeholders on skills attainment as demonstrated by test performance is such an important aspect of the new assessment, representatives from higher education must provide their input in helping to identify the performance zones on the new test.

In the years following the initial identification of the performance zones in each content area, the GED Testing Service will work with postsecondary institutions to validate the performance zones. Through a program of research that would follow test-takers' performance in postsecondary pathways, data would be collected that would provide empirical evidence of the relationship of performance on the GED® test with performance in credit-bearing postsecondary courses. Working cooperatively with a team of higher education representatives, the performance zones initially set in 2013 will be reviewed and adjusted as needed in light of the data.

### Conclusion

In summary, the 2014 GED® test is tied to career- and college-readiness content, in order to provide information to test-takers on how they exhibit critical academic knowledge and skills required for success in the majority of jobs and postsecondary programs in today's economy. At the same time, the 2014 GED® test will have a passing standard (which test-takers will need to reach in order to obtain a high school-equivalency credential) tied to actual empirical performance of a nationally representative sample of 2013 high school graduates, resulting in the continuing ability of

“The involvement of higher education institutions in the process of identifying performance zones in each content area is critical to the success of the new GED® assessment program.”

the GED® testing program to meet its longstanding purpose of being an alternate pathway to a high school credential for thousands of adults who need a second chance at success. Finally, because so many careers now require some sort of postsecondary education or credential, the 2014 GED® test will have performance zones that that will anchor feedback that is provided to test-takers to illustrate progression toward career and college readiness. The participation of postsecondary education institutions in the setting of performance zones will be a critical component of the program’s overall success.



# Terminology Short Reference for GED® Assessment Content

## Content Frameworks

**Instructional standards:** Refers to nationally recognized career- and college-readiness academic content standards, such as standards implemented in states like Texas and Virginia. Instructional standards were designed to inform classroom instruction in the K-12 educational system. They describe both the breadth and depth of mathematics and English-language arts and literacy skills that are most predictive of a student’s success in post-secondary education and a wide range of career pathways.

These skills are also important for the success of adult learners seeking to achieve their GED® credential. The GED® Mathematical Reasoning and Reasoning Through Language Arts Assessment Targets have been derived from these college- and career-readiness instructional standards, and the standards also inform the key skills identified for measurement in the GED® Science and Social Studies Assessment Targets.

The complete CCSS can be found at <http://www.corestandards.org>

The Texas College- and Career-Readiness Standards can be found at <http://www.theccb.state.tx.us/collegereadiness/crs.pdf>

The Virginia Standards of Learning can be found at [http://www.doe.virginia.gov/testing/sol/standards\\_docs/index.shtml](http://www.doe.virginia.gov/testing/sol/standards_docs/index.shtml)

Note: Currently, 44 states have adopted CCRS to guide instruction for their K-12 educational systems.

**Assessment targets:** Because the CCRS are designed to be instructional standards, they describe some skills that cannot be measured on a large-scale standardized assessment. For instance, understanding an excerpt in the context of a book-length text is an important skill for high school graduates to have mastered. Naturally, due to the time constraints, we cannot include whole books as sources

“The GED® Mathematical Reasoning and Reasoning Through Language Arts Assessment Targets have been derived from these college- and career-readiness instructional standards, and the standards also inform the key skills identified for measurement in the GED® Science and Social Studies Assessment Targets.”

on the GED® test. Therefore, the Assessment Targets for Mathematics, RLA, Science, and Social Studies provide a complete description of the skills and knowledge that will be measured on the next-generation GED® test. Though aligned to nationally recognized career- and college-readiness instructional standards, they focus on a core set of skills and abilities that can be measured reliably and validly in a large-scale standardized assessment. Evidence, such as the data presented in the National Curriculum Survey, strongly indicates that proficiency with the core skills identified in the assessment targets is predictive of success in a wide range of both career and postsecondary educational pathways.

**Domain:** High-level academic content categories within the Assessment Target documents. For example, the RLA Assessment Targets document contains three domains: reading, writing, and language. The Mathematics Assessment Targets include two domains: quantitative skills and algebraic skills. Each content target fits within a domain. (See *Chapter Two: Assessment Targets* for more detail.)

**Target:** Describes the academic content that will be measured on the new GED® assessment. Each target may contain one or more specific skills, which are identified in item-level indicators. For example, in the RLA content area, these targets are derived from the Anchor Standards, each of which comprises broad categories of instructional standards in the CCRS and Texas and Virginia state standards. (See *Chapter Two: Assessment Targets* for more detail.)

**Indicator:** Fine-grained descriptions of specific skills that will be assessed in individual test items. (See *Chapter Two: Assessment Targets* for more detail.)

**Depth of Knowledge:** The new GED® assessment will apply a Depth of Knowledge (DOK) model of cognitive levels to measure the content in mathematics, science, social studies, and RLA. The DOK levels of individual items will reflect the cognitive complexity—not the difficulty—of the tasks. The DOK levels will also be assigned to items on the basis of the cognitive demands of the targeted skill to which the item is aligned. (See *Chapter Two: Depth of Knowledge Summary* for more detail.)



## Item Types and Scoring Processes

**Extended response (ER) item:** Allow test-takers to demonstrate their written communication skills and analysis of text at a high DOK level by producing a writing sample in response to a prompt. There will be two ERs in the new GED® assessment: one on the RLA Test, the other on the Social Studies Test. Both ERs will require test-takers to respond to textual source materials.

**Prompt:** A prompt is a statement or a series of statements designed to elicit a written response from a test-taker. On the new GED® assessment, all prompts will require the test-taker to analyze and draw evidence and detail from one or more brief source texts accompanying the prompt. This will allow test-takers to demonstrate their ability to construct and support arguments they make within their extended responses.

**Extended response scoring rubric:** All of the ERs on the new GED® assessment will be scored using a multiple-trait scoring rubric. The rubric describes the skill levels demonstrated in test-taker responses in three dimensions or traits:

1. Analyzing Arguments and Using Evidence
2. Developing Ideas and Structure
3. Clarity and Conventions

(See *Chapter Three: Extended Response Scoring Rubrics* for more detail.)

**Short answer (SA) item:** The Science Test will feature SA items that will allow us to measure higher-level cognitive skills. These short-answer items will require test-takers to write a short paragraph in response to questions based on either (or both) graphic or textual stimuli.

**Short answer scoring guide:** Each SA will include its own scoring guide. The scoring guides will be composed of extensive lists of possible correct responses and will be specific to the items themselves. Lists of correct test-taker answers will be informed and populated by real responses observed during the rangefinding process.

**Rangefinding:** For each SA and ER item, a committee of subject matter experts will review a selection of test-taker

responses taken from field-testing. These experts will determine the range of responses that represent each score point in the ER scoring rubric and the SA scoring guides. Representative responses from the rangefinding pool will comprise sets of exemplars used to train scorers.

**Technology-enhanced (TE) item:** Because the new GED<sup>®</sup> assessment will be administered on a computer-based platform, we have the opportunity to assess a wide range of content more deeply and authentically with TE item types. These items create interactive tasks that require test-takers to manipulate aspects of the items on their computer screens. The types of TE items that appear on the new GED<sup>®</sup> test include drag-and-drop items, hot-spot items, drop-down items, fill-in-the-blank items, and multiple select items.

**Drag-and-drop item:** Drag-and-drop items are composed of two main parts: drag tokens and drop targets. Test-takers are typically given several drag tokens, which they must place on one or more specified drop targets. This item type may be employed in the service of sequencing or re-ordering tasks, graphing tasks, mapping tasks, and many others. This item type can be an effective tool that enables test-takers to interact with academic content in real-world situations, such as reordering paragraphs in a letter to improve the letter’s organization.

**Hot spot item:** Hot spot items typically contain a graphic (e.g. maps, graphs, diagrams, etc.) with virtual “sensors” placed in key locations on the graphic. The test-taker selects the correct answer by clicking on the designated sensor or by graphing a point onto it. This interactive item type allows test-takers to respond to graphic stimuli in a way that mirrors real-life situations, such as selecting locations on a map or gathering data from a graph.

**Drop-down item:** Drop-down items contain response opportunities embedded directly within a text. The new GED<sup>®</sup> assessment will employ this type primarily to assess language skills in tasks designed to mimic the editing process in an authentic manner. The items will present a brief text with five to eight drop-down menus embedded within. The drop-down menus will contain several answer options which, when selected, will appear within the text itself.

**Fill-in-the-blank (FIB) item:** Fill-in-the-blank items are, in essence, very brief short answer items. They will require



the test-taker to supply a word, short phrase, or numerical answer in response to an open-stem question. This item type can be used to assess a wide variety of skills. These items allow test-takers to construct their own responses when there is little variability in correct answers.

**Multiple choice (MC) item:** MC items will continue to appear on all four content areas of the new GED® assessment. Each MC item will have four answer options with only one correct answer.

**Passage sets:** The RLA Test will be composed of several passage sets. Each passage set will contain six to eight items that will be associated with a reading passage.

**Item scenarios:** The Mathematics, Science, and Social Studies tests will all feature item scenarios. An item scenario will be made up of a stimulus and two to three associated items. Stimuli may be a short text, a graphic, or a combination of graphic and short text.

**Discrete item:** The Mathematics, Science, and Social Studies tests will also include discrete items, or single items that may or may not have a stimulus embedded in their stems.





Chapter  
**2**

# Assessment Guide <sup>for</sup> Educators

A guide to the 2014 assessment content from GED Testing Service

July 2014 | Update



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## What's New in Chapter 2

The Assessment Guide for Educators provides adult education professionals key information about the upcoming 2014 GED® test. Since publishing the first version of the guide earlier in 2012, GED Testing Service has received questions and feedback from the field. This chapter contains no new changes since November 2012.

# What is Webb’s Depth of Knowledge Model?

## Introduction

In 2014, GED Testing Service will unveil a new assessment that fundamentally changes the GED® test and does a better job measuring the preparedness of adult learners for lifelong success. Four content-area assessments—Reasoning Through Language Arts (RLA), Mathematical Reasoning, Science, and Social Studies—measure a foundational core of knowledge and skills that are essential for career and college readiness.

*The Assessment Guide for Educators* is a frontline resource that helps adult educators and administrators better understand the content of the new assessment. Chapter 2 focuses on Webb’s Depth of Knowledge model, assessment targets for all four content areas, and passage requirements and exemplars for the RLA Test.

A GED® graduate must remain competitive with students who complete their high school credentials in the traditional manner. As the education community embraces career- and college-readiness standards, the new GED® assessment will meet the market’s demand for test-takers to be able to demonstrate these high-level skills. It’s a stepping-stone toward a college classroom or a better career and a family-sustaining wage.

## Webb’s Depth of Knowledge Model

The Depth of Knowledge (DOK) model is a framework for analyzing a wide range of educational materials on the basis of the cognitive demands they require in order for a learner to produce a response to those materials.<sup>1</sup> In 1997, Dr. Norman L. Webb developed this model for analyzing the varying levels of cognitive complexity in academic standards and curricula. GED Testing Service is using Webb’s DOK model to guide item development for the new assessment, in the same manner as Bloom’s Taxonomy of learning objectives was used to guide development of the 2002 Series GED® Test.

<sup>1</sup> [http://www.aps.edu/rda/documents/resources/Webbs\\_DOK\\_Guide.pdf](http://www.aps.edu/rda/documents/resources/Webbs_DOK_Guide.pdf)



### From Chapter One:

Employing a wide variety of item types should allow us to assess targeted content at a number of Depth of Knowledge levels.



### Find more information about the new

assessment in chapters one and three of the *Assessment Guide for Educators*:

- Item types
- Item layouts
- Terminology
- Scoring rubric information
- Reporting category descriptors
- More

Differences between Bloom’s Taxonomy and Webb’s DOK are shown in the comparison table on page 2.3.

At first glance, DOK might seem to resemble Bloom’s Taxonomy, but DOK actually takes a different approach. In Bloom’s Taxonomy, the focus is on a learner’s activity (e.g. applying, analyzing, creating, etc.). In DOK, the emphasis is on the *complexity* of the cognitive processes that each of those activities (applying, analyzing, creating) requires on the part of the learner. The DOK model also makes an important distinction between *difficulty* and *complexity*. Educators and test developers know that not all test-takers find the same items equally difficult; the assessment of a test item’s *complexity*, however, is far more consistent among test-takers. The term *complexity* does not refer to the level of challenge in an item, but rather to the cognitive steps a test-taker must go through to arrive at a correct answer.

For example, listing all U.S. presidents in order is relatively simple for someone who has memorized the list, but it would be quite difficult for someone who has not. Regardless of difficulty, this task would have a cognitive complexity DOK level of one, as it is a straightforward task requiring direct recall. On the other hand, comparing the role of the legislative branch with the judicial branch requires more strategic analysis of governmental branches. This task would have a cognitive complexity DOK level of three. DOK level is determined by content experts and experienced educators; difficulty is measured empirically when the items are field-tested. Items with higher DOK levels tend to be more difficult than items with a lower DOK level, but that is not necessarily or always the case.

In the development of items for the new GED® assessment, we will create items that use the DOK model to engage test-takers at a variety of levels of cognitive complexity. Roughly 80 percent of the items across all four content areas will be written to DOK levels two and three, and roughly 20 percent will require test-takers to engage level one DOK skills. However, as the DOK tables for each GED® assessment content area make clear, level four DOK entails extended reasoning and investigation (e.g. skills required to successfully complete long-term research projects). Therefore, DOK level four is beyond the scope of this assessment.

“Roughly 80 percent of the items across all four content areas will be written to DOK levels two and three, and roughly 20 percent will require test-takers to engage level one DOK skills.”

## A Comparison: Bloom’s Taxonomy and Webb’s Depth of Knowledge<sup>2</sup>

BLOOM’S TAXONOMY	WEBB’S DEPTH OF KNOWLEDGE <sup>3</sup>
<p><b>KNOWLEDGE</b></p> <p>“The recall of specifics and universals, involving little more than bringing to mind the appropriate material”</p>	<p><b>RECALL</b></p> <p>Recall of a fact, information, or procedure (e.g. What are three critical skill cues for the overhand throw?)</p>
<p><b>COMPREHENSION</b></p> <p>“Ability to process knowledge on a low level such that the knowledge can be reproduced or communicated without a verbatim repetition.”</p>	
<p><b>APPLICATION</b></p> <p>“The use of abstractions in concrete situations.”</p>	<p><b>BASIC APPLICATION OF SKILL/CONCEPT</b></p> <p>Use of information, conceptual knowledge, procedures, two or more steps, etc. (e.g. Explain why each skill cue is important to the overhand throw. “By stepping forward you are able to throw the ball further.”)</p>
<p><b>ANALYSIS</b></p> <p>“The breakdown of a situation into its component parts.”</p>	<p><b>STRATEGIC THINKING</b></p> <p>Requires reasoning, developing a plan or sequence of steps; has some complexity; more than one possible answer; generally takes less than ten minutes to do (e.g. Design 2 different plays in basketball and explain what different skills are needed and when the plays should be carried out.)</p>
<p><b>SYNTHESIS AND EVALUATION</b></p> <p>“Putting together elements &amp; parts to form a whole, then making value judgments about the method.”</p>	<p><b>EXTENDED THINKING</b></p> <p>Requires an investigation; time to think and process multiple conditions of the problem or task; and more than ten minutes to do non-routine manipulations (e.g. Analyze three different tennis, racquetball, and badminton strokes for similarities, differences, and purposes. Then, discuss the relationship between the mechanics of the stroke and the strategy for using the stroke during game play.)</p>

2 Bloom’s Taxonomy and Webb’s Depth of Knowledge comparison table source: <http://www.palmbeachschools.org/qa/documents/WebbsDepthofKnowledge.pdf>

3 Each of the four descriptions below correspond with a DOK level. For example, “Recall” corresponds to DOK 1, “Basic Application” to DOK 2, “Strategic Thinking” to DOK 3, and “Extended Thinking” to DOK 4.

English Language Arts<sup>4</sup>

Subject	Depth of Knowledge			
	Level 1	Level 2	Level 3	Level 4
English Language Arts	<p>Requires students to recall, observe, question, or represent facts or simple skills or abilities. Requires only surface understanding of text, often verbatim recall or slight paraphrasing. Use conventions of standard English.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Support ideas by reference to specific details in text</li> <li>• Use dictionary to find meaning</li> <li>• Use punctuation marks correctly</li> <li>• Identify figurative language in passage</li> <li>• Identify correct spelling or meaning of words</li> </ul>	<p>Requires processing beyond recall and observation. Requires both comprehension and subsequent processing of text. Involves ordering, classifying text as well as identifying patterns, relationships and main points. Connect ideas using simple organizational structures. Requires some scrutiny of text.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Use contextual clues to identify unfamiliar words</li> <li>• Predict logical outcome</li> <li>• Construct or edit compound or complex sentences</li> <li>• Identify and summarize main points</li> <li>• Apply knowledge of conventions of standard American English</li> <li>• Compose accurate summaries</li> </ul>	<p>Requires students to go beyond text. Requires students to explain, generalize, and connect ideas. Involves inferencing, prediction, elaboration, and summary. Requires students to support positions using prior knowledge and to manipulate themes across passages. Students develop compositions with multiple paragraphs.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Determine effect of author’s purpose on text elements</li> <li>• Summarize information from multiple sources</li> <li>• Critically analyze literature</li> <li>• Edit writing to produce logical progression</li> <li>• Compose focused, organized, coherent, purposeful prose</li> </ul>	<p>Requires extended higher order processing. Typically requires extended time to complete task, but time spent not on repetitive tasks. Involves taking information from one text/passage and applying this information to a new task. May require generating hypotheses and performing complex analyses and connections among texts.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Analyze and synthesize information from multiple sources</li> <li>• Examine and explain alternative perspectives across sources</li> <li>• Describe and illustrate common themes across a variety of texts</li> <li>• Create compositions that synthesize, analyze, and evaluate</li> </ul>

4 The English Language Arts table is used with permission of Dr. Norman L. Webb from the University of Wisconsin Center for Educational Research.

Mathematics<sup>5</sup>

Subject	Depth of Knowledge			
	Level 1	Level 2	Level 3	Level 4
<b>Mathematics</b>	<p>Requires students to recall or observe facts, definitions, or terms. Involves simple one-step procedures. Involves computing simple algorithms (e.g. sum, quotient).</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>Recall or recognize a fact, term or property</li> <li>Represent in words, pictures or symbols in a math object or relationship</li> <li>Perform routine procedure like measuring</li> </ul>	<p>Requires students to make decisions of how to approach a problem. Requires students to compare, classify, organize, estimate, or order data. Typically involves two-step procedures.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>Specify and explain relationships between facts, terms, properties or operations</li> <li>Select procedure according to criteria and perform it</li> <li>Solve routine multiple-step problems</li> </ul>	<p>Requires reasoning, planning, or use of evidence to solve problem or algorithm. May involve activity with more than one possible answer. Requires conjecture or restructuring of problems. Involves drawing conclusions from observations, citing evidence, and developing logical arguments for concepts. Uses concepts to solve non-routine problems.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>Analyze similarities and differences between procedures</li> <li>Formulate original problem given situation</li> <li>Formulate mathematical model for complex situation</li> </ul>	<p>Requires complex reasoning, planning, developing, and thinking. Typically requires extended time to complete problem, but time spent not on repetitive tasks. Requires students to make several connections and apply one approach among many to solve the problem. Involves complex restructuring of data, establishing and evaluating criteria to solve problems.</p> <p>Examples:</p> <ul style="list-style-type: none"> <li>Apply mathematical model to illuminate a problem, situation</li> <li>Conduct a project that specifies a problem, identifies solution paths, solves the problem, and reports results</li> <li>Design a mathematical model to inform and solve a practical or abstract situation</li> </ul>

5 The Mathematics table is used with permission of Dr. Norman L. Webb from the University of Wisconsin Center for Educational Research.



Science<sup>6</sup>

Depth of Knowledge Level Descriptors for Science			
Level 1 Recall & Reproduction	Level 2 Skills & Concepts	Level 3 Strategic Thinking	Level 4 Extended Thinking
<p>a. Recall or recognize a fact, term, definition, simple procedure (such as one step), or property</p> <p>b. Demonstrate a rote response</p> <p>c. Use a well-known formula</p> <p>d. Represent in words or diagrams a scientific concept or relationship</p> <p>e. Provide or recognize a standard scientific representation for simple phenomenon</p> <p>f. Perform a routine procedure, such as measuring length</p> <p>g. Perform a simple science process or a set procedure (like a recipe)</p> <p>h. Perform a clearly defined set of steps</p> <p>i. Identify, calculate, or measure</p> <p><b>NOTE:</b> If the knowledge necessary to answer an item automatically provides the answer, it is a Level 1.</p>	<p>a. Specify and explain the relationship between facts, terms, properties, or variables</p> <p>b. Describe and explain examples and non- examples of science concepts</p> <p>c. Select a procedure according to specified criteria and perform it</p> <p>d. Formulate a routine problem given data and conditions</p> <p>e. Organize, represent, and compare data</p> <p>f. Make a decision as to how to approach the problem</p> <p>g. Classify, organize, or estimate</p> <p>h. Compare data</p> <p>i. Make observations</p> <p>j. Interpret information from a simple graph</p> <p>k. Collect and display data</p> <p><b>NOTE:</b> If the knowledge necessary to answer an item does not automatically provide the answer, then the item is at least a Level 2. Most actions imply more than one step.</p> <p><b>NOTE:</b> Level 3 is complex and abstract. If more than one response is possible, it is at least a Level 3 and calls for use of reasoning, justification, evidence, as support for the response.</p>	<p>a. Interpret information from a complex graph (such as determining features of the graph or aggregating data in the graph)</p> <p>b. Use reasoning, planning, and evidence</p> <p>c. Explain thinking (beyond a simple explanation or using only a word or two to respond)</p> <p>d. Justify a response</p> <p>e. Identify research questions and design investigations for a scientific problem</p> <p>f. Use concepts to solve non-routine problems/more than one possible answer</p> <p>g. Develop a scientific model for a complex situation</p> <p>h. Form conclusions from experimental or observational data</p> <p>i. Complete a multi-step problem that involves planning and reasoning</p> <p>j. Provide an explanation of a principle</p> <p>k. Justify a response when more than one answer is possible</p> <p>l. Cite evidence and develop a logical argument for concepts</p> <p>m. Conduct a designed investigation</p> <p>n. Research and explain a scientific concept</p> <p>o. Explain phenomena in terms of concepts</p>	<p>a. Select or devise approach among many alternatives to solve problem</p> <p>b. Based on provided data from a complex experiment that is novel to the student, deduct the fundamental relationship between several controlled variables</p> <p>c. Conduct an investigation, from specifying a problem to designing and carrying out an experiment, to analyzing its data and forming conclusions</p> <p>d. Relate ideas within the content area or among content areas</p> <p>e. Develop generalizations of the results obtained and the strategies used and apply them to new problem situations</p> <p><b>NOTE:</b> Level 4 activities often require an extended period of time for carrying out multiple steps; however, time alone is not a distinguishing factor if skills and concepts are simply repetitive over time.</p>

6 © Karin K. Hess, National Center of Assessment, Dover, NH. khess@nciea.org.  
Link: [http://www.nciea.org/publications/DOKscience\\_KH11.pdf](http://www.nciea.org/publications/DOKscience_KH11.pdf)

Social Studies<sup>7</sup>

Depth of Knowledge Level Descriptors for Social Studies			
Level 1 Recall of Information	Level 2 Basic Reasoning	Level 3 Complex Reasoning	Level 4 Extended Reasoning
<ul style="list-style-type: none"> <li>a. Recall or recognition of: fact, term, concept, trend, generalization, event, or document</li> <li>b. Identify or describe features of places or people</li> <li>c. Identify key figures in a particular context meaning of words</li> <li>d. Describe or explain: who, what, where, when</li> <li>e. Identify specific information contained in maps, charts, tables, graphs, or drawings</li> </ul>	<ul style="list-style-type: none"> <li>a. Describe cause-effect of particular events</li> <li>b. Describe or explain: how (relationships or results), why, points of view, processes, significance, or impact</li> <li>c. Identify patterns in events or behavior</li> <li>d. Categorize events or figures in history into meaningful groups</li> <li>e. Identify and summarize the major events, problem, solution, conflicts</li> <li>f. Distinguish between fact and opinion</li> <li>g. Organize information to show relationships</li> <li>h. Compare and contrast people, events, places, concepts</li> <li>i. Give examples and non-examples to illustrate an idea/concept</li> </ul>	<ul style="list-style-type: none"> <li>a. Explain, generalize, or connect ideas, using supporting evidence from a text/source</li> <li>c. Apply a concept in other contexts</li> <li>d. Make and support inferences about implied causes and effects</li> <li>e. Draw conclusion or form alternative conclusions</li> <li>f. Analyze how changes have affected people or places</li> <li>g. Use concepts to solve problems</li> <li>h. Analyze similarities and differences in issues or problems</li> <li>i. Propose and evaluate solutions</li> <li>j. Recognize and explain misconceptions related to concepts</li> </ul>	<ul style="list-style-type: none"> <li>a. Analyze and explain multiple perspectives or issues within or across time periods, events, or cultures</li> <li>b. Gather, analyze, organize, and synthesize information from multiple (print and non print) sources</li> <li>c. Make predictions with evidence as support</li> <li>d. Plan and develop solutions to problems</li> <li>e. Given a situation/problem, research, define, and describe the situation/problem and provide alternative solutions</li> <li>f. Describe, define, and illustrate common social, historical, economic, or geographical themes and how they interrelate</li> </ul>


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 Link: [http://www.nciea.org/publications/DOKsocialstudies\\_KH08.pdf](http://www.nciea.org/publications/DOKsocialstudies_KH08.pdf)

# Assessment Targets for All Four Content Areas

The purposes of the GED® assessment are to provide:

1. A path to a high school credential
2. Evidence of readiness to enter workforce training programs or postsecondary education
3. Information about a candidate’s strengths and areas of developmental need in key academic areas

The philosophy underlying the GED® assessment is that there is a foundational core, or *domain*, of academic skills and content knowledge that must be acquired in order for an adult to be prepared to enter a job, a training program, or an entry-level, credit-bearing postsecondary course. This foundational core of knowledge and skills is defined by career- and college-readiness standards now adopted by the majority of states.



**Domain** is a foundational core of academic skills and content knowledge.

## Reasoning Through Language Arts (RLA) Assessment Targets

### Content Parameters for RLA

In alignment with career- and college-readiness standards, the GED® RLA assessment focuses on three essential groupings of skills:

- The ability to read closely
- The ability to write clearly
- The ability to edit and understand the use of standard written English in context

Because the strongest predictor of career and college readiness is the ability to read and comprehend complex texts, especially nonfiction, the RLA Test will include texts from both academic and workplace contexts. These texts will reflect a range of complexity levels, in terms of ideas, syntax and style. The writing tasks, or Extended Response (ER) items, will require test-takers to analyze given source texts and use evidence drawn from the text(s) to support their answers.

Given these priorities, the GED® RLA Test adheres to the following parameters:

1. Seventy-five percent of the texts in the exam will be informational texts (including nonfiction drawn from the science and the social studies as well as a range of texts from workplace contexts); 25 percent will be literature.
2. The texts included in the test will cover a range of text complexity, including texts at the career- and college-readiness level.
3. For texts in which comprehension hinges on vocabulary, the focus will be on understanding words that appear frequently in texts from a wide variety of disciplines and, by their definition, are not unique to a particular discipline<sup>8</sup>.

8 The following are words that have applications in texts drawn from multiple disciplines: from informational texts (*relative, vary, formulate, specificity, and accumulate*), from technical texts (*calibrate, itemize, periphery*), and from literary texts (*misfortune, dignified, faltered, unabashedly*). Unlike discipline-specific terms, these words are not limited to a particular field of study.



### Assessment targets:

The assessment targets for all four content areas provide a complete description of the skills and knowledge that will be measured on the new assessment. Evidence strongly indicates that proficiency with the core skills identified in the assessment targets is predictive of success in a wide range of career and college pathways.



### About the assessment:

#### Content

Content parameters govern the proportions of content that will appear on the test forms and ensure item distribution across the assessment targets.



### About the assessment:

#### “The Great

American Conversation” refers to texts like the founding documents (e.g. The Bill of Rights) or other sources, including more contemporary ones, that reflect important ideas about American citizenship and modern liberties.

- 4. U.S. founding documents and the “the Great American Conversation” that followed will be required texts for study and assessment.
- 5. The length of the texts included in the reading comprehension component of the test will vary between 450 and 900 words.
- 6. Roughly 80 percent of the items will be written to a Depth of Knowledge cognitive complexity level 2 or 3; DOK level 4 is beyond the scope of the GED® test..
- 7. Reading and writing standards, such as those found in career- and college-readiness standards, will also be measured in the GED® Social Studies Test, and the reading standards will be measured in the GED® Science Test.

### Reading Comprehension on the GED® RLA Test

The reading comprehension component of the GED® RLA Test is intended to measure two overarching reading standards that appear in the Common Core State Standards as Anchor Reading Standards 1 and 10, respectively:

- Determine the details of what is explicitly stated and make logical inferences or valid claims that square with textual evidence
- Read and respond to questions from a range of texts that are from the upper levels of complexity, including texts at the career- and college-ready level of text complexity

These two high-level standards broadly govern all aspects of passage selection and item development in the reading comprehension component of the GED® RLA Test. As candidates are asked to determine the main idea, the point of view, the meaning of words and phrases, and other inferences and claims, they will be asked to do so based on texts that span a range of complexity, including texts at the career- and college-readiness level. The specific assessment targets that define the domain of the reading component of the GED® RLA Test and the connection to career- and college-readiness standards are described next.

The targets and indicators in the following tables are derived from Common Core Reading Comprehension and Language Anchor Standards and govern the skills assessed in individual items.



#### About the assessment:

Each target and indicator in the RLA assessment targets corresponds to one or more *Anchor Standards* from the Common Core State Standards for English Language Arts. For example, R.2 refers to Reading Anchor Standard 2. Similarly, W and L refer to Writing Anchor Standards and Language Anchor Standards respectively.

For more detailed information on the CCSS for English Language Arts and Literacy, go to <http://www.corestandards.org/the-standards/english-language-arts-standards>

## Reading Assessment Targets

Common Core Connection: R.2 <sup>9</sup>	Range of Depth of Knowledge (DOK) Levels <sup>10</sup>
<p><b>Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.</b></p> <p><b>R.2.1</b> Comprehend explicit details and main ideas in text. <b>1-2</b></p> <p><b>R.2.2</b> Summarize details and ideas in text. <b>2</b></p> <p><b>R.2.3</b> Make sentence level inferences about details that support main ideas. <b>2-3</b></p> <p><b>R.2.4</b> Infer implied main ideas in paragraphs or whole texts. <b>2-3</b></p> <p><b>R.2.5</b> Determine which detail(s) support(s) a main idea. <b>1-3</b></p> <p><b>R.2.6</b> Identify a theme, or identify which element(s) in a text support a theme. <b>1-3</b></p> <p><b>R.2.7</b> Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations. <b>2-3</b></p> <p><b>R.2.8</b> Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. <b>2-3</b></p>	
<p><b>Common Core Connection: R.3</b></p>	
<p><b>Analyze how individuals, events, and ideas develop and interact over the course of a text.</b></p> <p><b>R.3.1</b> Order sequences of events in texts. <b>1-2</b></p> <p><b>R.3.2</b> Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts. <b>2</b></p> <p><b>R.3.3</b> Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning. <b>2-3</b></p> <p><b>R.3.4</b> Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship). <b>2-3</b></p> <p><b>R.3.5</b> Analyze the roles that details play in complex literary or informational texts. <b>2-3</b></p>	
<p><b>Common Core Connection: R.4.2; L4.2</b></p>	
<p><b>Interpret words and phrases that appear frequently in texts from a wide variety of disciplines, including determining connotative and figurative meanings from context and analyzing how specific word choices shape meaning or tone.</b></p> <p><b>R.4.1/L.4.1</b> Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context. <b>1-3</b></p> <p><b>R.4.2/L.4.2</b> Analyze how meaning or tone is affected when one word is replaced with another. <b>2</b></p> <p><b>R.4.3/L.4.3</b> Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author's intent to convey information or construct an argument. <b>2-3</b></p>	

9 See the Common Core State Standards for English Language Arts and Literacy at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed at the beginning of each Reading Assessment Target.

10 The Depth of Knowledge (DOK) levels correspond with Norman Webb's (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

### Reading Assessment Targets

Common Core Connection: R.5 <sup>9</sup>	Range of Depth of Knowledge (DOK) Levels <sup>10</sup>
<p><b>Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.</b></p> <p><b>R.5.1</b> Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.</p> <p><b>R.5.2</b> Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).</p> <p><b>R.5.3</b> Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author's purpose.</p> <p><b>R.5.4</b> Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author's purpose.</p>	<p><b>2-3</b></p> <p><b>2-3</b></p> <p><b>2</b></p> <p><b>2-3</b></p>
<p><b>Common Core Connection: R.6</b></p>	
<p><b>Determine an author's purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.</b></p> <p><b>R.6.1</b> Determine an author's point of view or purpose of a text.</p> <p><b>R.6.2</b> Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints.</p> <p><b>R.6.3</b> Infer an author's implicit as well as explicit purposes based on details in text.</p> <p><b>R.6.4</b> Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements).</p>	<p><b>1-2</b></p> <p><b>2-3</b></p> <p><b>2</b></p> <p><b>2-3</b></p>
<p><b>Common Core Connection: R.8</b></p>	
<p><b>Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.</b></p> <p><b>R.8.1</b> Delineate the specific steps of an argument the author puts forward, including how the argument's claims build on one another.</p> <p><b>R.8.2</b> Identify specific pieces of evidence an author uses in support of claims or conclusions.</p> <p><b>R.8.3</b> Evaluate the relevance and sufficiency of evidence offered in support of a claim.</p> <p><b>R.8.4</b> Distinguish claims that are supported by reasons and evidence from claims that are not.</p> <p><b>R.8.5</b> Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact.</p> <p><b>R.8.6</b> Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided.</p>	<p><b>2-3</b></p> <p><b>1-3</b></p> <p><b>2-3</b></p> <p><b>2-3</b></p> <p><b>2-3</b></p> <p><b>2-3</b></p>

9 See the Common Core State Standards for English Language Arts and Literacy at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed at the beginning of each Reading Assessment Target.

10 The Depth of Knowledge (DOK) levels correspond with Norman Webb's (University of Wisconsin) Depth of Knowledge model of cognitive complexity.



## Reading Assessment Targets

Common Core Connection: R.7 & R.90 <sup>9</sup>	Range of Depth of Knowledge (DOK) Levels <sup>10</sup>
<p><b>Analyze how two or more texts address similar themes or topics</b></p> <p><b>R.9.1/R. 7.1</b> Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).</p> <p><b>R.9.2</b> Compare two passages in similar or closely related genre that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or overall impact.</p> <p><b>R.9.3</b> Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts.</p>	<p><b>2-3</b></p> <p><b>2-3</b></p> <p><b>2-3</b></p>
<p><b>R.7.2</b> Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author's argument.</p> <p><b>R.7.3</b> Compare two passages that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.</p> <p><b>R.7.4</b> Compare two passages that present related ideas or themes in different genre or formats in order to synthesize details, draw conclusions, or apply information to new situations.</p>	<p><b>2-3</b></p> <p><b>2-3</b></p> <p><b>2-3</b></p>

9 See the Common Core State Standards for English Language Arts and Literacy at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed at the beginning of each Reading Assessment Target.

10 The Depth of Knowledge (DOK) levels correspond with Norman Webb's (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

## Writing on the GED® RLA Test

The writing component integrates reading and writing into meaningful tasks that require candidates to support their written analysis with evidence drawn from a given source text(s) of appropriate complexity provided in the test.<sup>11</sup> Also, given the growing demand and use of technology in all levels of postsecondary education and careers, the GED® test will be administered by computer. Therefore, as in the reading component of the RLA Test, the following two high-level standards, which correspond with Common Core Anchor Standards 9 and 6 respectively, broadly govern all aspects of the writing tasks.

1. Draw relevant and sufficient evidence from a literary or information text to support analysis and reflection.
2. Use technology to produce writing, demonstrating sufficient command of keyboarding skills.

Candidate responses will be scored by a multi-trait rubric that focuses on three elements:

- **Trait 1:** Analysis of Arguments and Use of Evidence
- **Trait 2:** Development of Ideas and Structure
- **Trait 3:** Clarity and Command of Standard English Conventions

The specific assessment targets that define the domain of the writing component of the GED® RLA Test and the connection to the Common Core State Standards are described next.

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“The writing component integrates reading and writing into meaningful tasks that require candidates to support their written analysis with evidence drawn from a given source text(s) of appropriate complexity provided in the test.”

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11 In the career- and college-readiness standards, writing skills are deeply integrated with reading skills. Therefore, extended response items on the RLA test will require test-takers to apply skills described in CCSS Reading Anchor Standards 1 and 10 (see p.2 of GED® RLA Assessment Targets) as analyze source texts in their own writing.

## Writing Assessment Targets

<b>Common Core Connections: R.1<sup>12</sup></b>	<b>Range of Depth of Knowledge (DOK) Levels<sup>13</sup></b>
<b>W.1</b> Determine the details of what is explicitly stated and make logical inferences or valid claim that square with textual evidence.	<b>1-3</b>
<b>Common Core Connection: W.1, W.2 and W.4</b>	
<b>W.2</b> Produce an extended analytic response in which the writer introduces the idea(s) or claim(s) clearly; creates an organization that logically sequences information; develops the idea(s) or claim(s) thoroughly with well-chosen examples, facts, or details from the text; and maintains a coherent focus.	<b>2-3</b>
<b>Common Core Connection: W.5 and L.1, L.2, and L.3</b>	
<b>W.3</b> Write clearly and demonstrate sufficient command of standard English conventions. <sup>14</sup>	<b>1-2</b>

12 See the Common Core State Standards for English Language Arts and Literacy at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed at the beginning of each Writing Assessment Target.

13 The Depth of Knowledge (DOK) levels correspond with Norman Webb’s (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

14 “Sufficient command of standard English conventions” is meant to signal that the assessment would seek “mostly correct use” by students, not “total correctness.” See RLA Extended Response Scoring Rubric, Trait 3 (page 3.10) for more information.

**Language Conventions and Usage on the GED® RLA Test**

The language component of the GED® RLA Test measures a candidate’s ability to demonstrate command of a foundational set of conventions of standard English that have been identified as most important for career and college readiness by higher education instructors of post-secondary entry-level, credit-bearing composition courses. This core set of skills includes essential components of grammar, usage, capitalization and punctuation.

The GED® RLA Test will include editing items in an authentic context in which highlighted words or phrases appear in drop-down menus offering alternatives, which will include a clear best choice alongside common errors or misconceptions.

The specific assessment targets that define the domain of the language component of the GED® RLA Test and the connection to the Common Core State Standards are described next.



## Language Assessment Targets

Common Core Connection: L.1 <sup>15</sup>	Range of Depth of Knowledge (DOK) Levels <sup>16</sup>
<p><b>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</b></p> <p><b>L.1.1</b> Edit to correct errors involving frequently confused words and homonyms, including contractions (passed, past; two, too, to; there, their, they're; knew, new; it's its).</p> <p><b>L.1.2</b> Edit to correct errors in straightforward subject-verb agreement.</p> <p><b>L.1.3</b> Edit to correct errors in pronoun usage, including pronoun-antecedent agreement, unclear pronoun references, and pronoun case.</p> <p><b>L.1.4</b> <i>Edit to eliminate non-standard or informal usage (e.g., correctly use try to win the game instead of try and win the game).</i></p> <p><b>L.1.5</b> Edit to eliminate dangling or misplaced modifiers or illogical word order (e.g., correctly use to meet almost all requirements instead of to almost meet all requirements.)</p> <p><b>L.1.6</b> Edit to ensure parallelism and proper subordination and coordination.</p> <p><b>L.1.7</b> Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns).</p> <p><b>L.1.8</b> Edit to eliminate wordiness or awkward sentence construction.</p> <p><b>L.1.9</b> Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity.</p>	<p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p>
Common Core Connection: L.2 <sup>15</sup>	Range of Depth of Knowledge (DOK) Levels <sup>16</sup>
<p><b>Demonstrate command of the conventions of standard English capitalization and punctuation when writing.</b></p> <p><b>L.2.1</b> Edit to ensure correct use of capitalization (e.g., proper nouns, titles, and beginnings of sentences).</p> <p><b>L.2.2</b> Edit to eliminate run-on sentences, fused sentences, or sentence fragments.</p> <p><b>L.2.3</b> Edit to ensure correct use of apostrophes with possessive nouns.</p> <p><b>L.2.4</b> Edit to ensure correct use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation).</p>	<p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p> <p><b>1-2</b></p>

15 See the Common Core State Standards for English Language Arts and Literacy at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed at the beginning of each Language Assessment Target.

16 The Depth of Knowledge (DOK) levels correspond with Norman Webb's (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

# Mathematical Reasoning Assessment Targets

## Content Parameters for GED® Mathematical Reasoning Test

The GED® Mathematical Reasoning Test will focus on two major content areas: quantitative problem solving and algebraic problem solving. Evidence that was used to inform the development of the career- and college-readiness standards shows that instructors of entry-level college mathematics value master of fundamentals over a broad, shallow coverage of topics. National remediation data are consistent with this perspective, suggesting that students with a shallow grasp of a wide range of topics are not as well prepared to succeed in postsecondary education and are more likely to need remediation in mathematics compared to those students who have a deeper understanding of more fundamental mathematical topics. Therefore, the GED® Mathematical Reasoning Test will focus on the fundamentals of mathematics in these two areas, striking a balance of deeper conceptual understanding, procedural skill and fluency, and the ability to apply these fundamentals in realistic situations. A variety of item types will be used in the test, including multiple choice, drag-and-drop, hot spot, and fill-in-the-blank.

The career- and college-readiness standards include *Standards for Mathematical Practice*, which describe the types of practices, or behaviors, in mathematics that are essential to the mastery of mathematical content. These standards form the basis of the GED® mathematical practice standards, which assess important mathematical proficiencies, including modeling, constructing and critiquing reasoning, and procedural fluency.

Given these priorities, the GED® Mathematical Reasoning Test adheres to the following parameters:

1. Approximately 45 percent of the content in the test will focus on quantitative problem solving, and approximately 55 percent will focus on algebraic problem solving.
2. The test will include items that test procedural skill and fluency as well as problem solving.



### Modeling links classroom mathematics

and statistics to everyday life, work, and decision-making. Modeling is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better and improve decisions.

From Common Core State Standards for Mathematics, p. 72. [www.corestandards.org](http://www.corestandards.org)



### About the assessment: Content

parameters govern the proportions of content that will appear on the test forms and ensure item distribution across the assessment targets.

3. The contexts within which problem solving skills will be measured will be taken from both academic and workforce contexts.
4. Approximately 50 percent of the items will be written to a Depth of Knowledge cognitive complexity level of 2.
5. Approximately 30 percent of the items will be aligned to a Mathematical Practice standard in addition to a content indicator.
6. The statistics and data interpretation standards will also be measured in the GED® Social Studies and Science tests.
7. Candidates will be provided with an on-screen calculator, the Texas Instruments TI-30XS Multiview scientific calculator, for use on most of the items on the 2014 GED® Mathematics Test. (The on-screen calculator will also be provided for selected items on the Science and Social Studies tests.)

The specific assessment targets that define the domain of the GED® Mathematical Reasoning Test and the connection to the Common Core State Standards are described next.



**About the assessment:**  
Each target

and indicator in the Mathematics test targets corresponds with one or more domains from the Common Core State Standards (CCSS) of Mathematics as indicated by the column on the right-hand side of the Mathematics Content Matrix on the following page. For example, 6.EE refers to skills introduced in Grade 6 in the Common Core mathematics domain of Expressions & Equations. Many foundational skills assessed on the new assessment are drawn from CCRS instructional standards that are introduced in earlier grades, but must be mastered at a high school level to ensure success in careers and college.

For more detailed information on the CCSS for Mathematics, go to [www.corestandards.org/the-standards/mathematics](http://www.corestandards.org/the-standards/mathematics)

<b>Common Core State Standards References<sup>17</sup></b>		<b>Quantitative Problem Solving Assessment Targets Content Indicators</b>	<b>Range of Depth of Knowledge (DOK)<sup>18</sup></b>
	<b>Q.1</b>	<b>Apply number sense concepts, including ordering rational numbers, absolute value, multiples, factors, and exponents</b>	
4.NF.2; 6.NS.6; 6.NS.7	Q.1.a	Order fractions and decimals, including on a number line.	1-2
6.NS.4	Q.1.b	Apply number properties involving multiples and factors, such as using the least common multiple, greatest common factor, or distributive property to rewrite numeric expressions.	1-2
8.EE.1; N-RN.2	Q.1.c	Apply rules of exponents in numerical expressions with rational exponents to write equivalent expressions with rational exponents.	1-2
6.NS.7; 7.NS.1	Q.1.d	Identify absolute value or a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, including using the absolute value of their difference.	1-2
	<b>Q.2</b>	<b>Add, subtract, multiply, divide, and use exponents and roots of rational, fraction and decimal numbers</b>	
7.NS.1; 7.NS.2	Q.2.a	Perform addition, subtraction, multiplication, and division on rational numbers.	1-2
8.EE.2; N-RN.2	Q.2.b	Perform computations and write numerical expressions with squares and square roots of positive, rational numbers.	1-2
8.EE.2; N-RN.2	Q.2.c	Perform computations and write numerical expressions with cubes and cube roots of rational numbers.	1-2
7.NS.2	Q.2.d	Determine when a numerical expression is undefined.	2
7.NS.3; 7.EE.3; 8.EE.4; N-Q.1	Q.2.e	Solve one-step or multi-step arithmetic, real world problems involving the four operations with rational numbers, including those involving scientific notation.	1-2
	<b>Q.3</b>	<b>Calculate and use ratios, percents and scale factors</b>	
6.RP.3; 7.RP.1; G-MG.2	Q.3.a	Compute unit rates. Examples include but are not limited to: unit pricing, constant speed, persons per square mile, BTUs per cubic foot.	1-2
7.G.1	Q.3.b	Use scale factors to determine the magnitude of a size change. Convert between actual drawings and scale drawings.	1-2
6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; N-Q.1	Q.3.c	Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure.	2
7.RP.3	Q.3.d	Solve two-step, arithmetic, real world problems involving percents. Examples include but are not limited to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase and decrease.	1-2

17 See the Common Core State Standards for Mathematics at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed in the column.

18 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) Depth of Knowledge model for cognitive complexity.



<b>Common Core State Standards References<sup>17</sup></b>		<b>Quantitative Problem Solving Assessment Targets Content Indicators</b>	<b>Range of Depth of Knowledge (DOK)<sup>18</sup></b>
	<b>Q.4</b>	<b>Calculate dimensions, perimeter, circumference, and area of two-dimensional figures</b>	
7.G.6	Q.4.a	Compute the area and perimeter of triangles and rectangles. Determine side lengths of triangles and rectangles when given area or perimeter.	1-2
7.G.4	Q.4.b	Compute the area and circumference of circles. Determine the radius or diameter when given area or circumference	1-2
6.EE.2; 7.G.6	Q.4.c	Compute the perimeter of a polygon. Given a geometric formula, compute the area of a polygon. Determine side lengths of the figure when given the perimeter or area.	1-2
6.EE.2; 7.G.6; 8.G.9	Q.4.d	Compute perimeter and area of 2-D composite geometric figures, which could include circles, given geometric formulas as needed.	1-2
8.G.7	Q.4.e	Use the Pythagorean theorem to determine unknown side lengths in a right triangle.	1-2
	<b>Q.5</b>	<b>Calculate dimensions, surface area, and volume of three-dimensional figures</b>	
6.EE.2; 7.G.6; 8.G.9	Q.5.a	When given geometric formulas, compute volume and surface area of rectangular prisms. Solve for side lengths or height, when given volume or surface area.	1-2
6.EE.2; 7.G.6; 8.G.9	Q.5.b	When given geometric formulas, compute volume and surface area of cylinders. Solve for height, radius, or diameter when given volume or surface area.	1-2
6.EE.2; 7.G.6; 8.G.9	Q.5.c	When given geometric formulas, compute volume and surface area of right prisms. Solve for side lengths or height, when given volume or surface area.	1-2
6.EE.2; 7.G.6; 8.G.9	Q.5.d	When given geometric formulas, compute volume and surface area of right pyramids and cones. Solve for side lengths, height, radius, or diameter when given volume or surface area.	1-2
6.EE.2; 8.G.9	Q.5.e	When given geometric formulas, compute volume and surface area of spheres. Solve for radius or diameter when given the surface area.	1-2
6.EE.2; 8.G.9	Q.5.f	Compute surface area and volume of composite 3-D geometric figures, given geometric formulas as needed.	1-2
	<b>Q.6</b>	<b>Interpret and create data displays</b>	
7.RP.2; 3.MD.3	Q.6.a	Represent, display, and interpret categorical data in bar graphs or circle graphs.	1-2
S-ID.1	Q.6.b	Represent, display, and interpret data involving one variable plots on the real number line including dot plots, histograms, and box plots.	1-2
8.SP.1	Q.6.c	Represent, display, and interpret data involving two variables in tables and the coordinate plane including scatter plots and graphs.	1-2
	<b>Q.7</b>	<b>Calculate and use mean, median, mode and weighted average</b>	
6.SP.3; S-MD.2	Q.7.a	Calculate the mean, median, mode and range. Calculate a missing data value, given the average and all the missing data values but one, as well as calculating the average, given the frequency counts of all the data values, and calculating a weighted average.	1-2
	<b>Q.8</b>	<b>Utilize counting techniques and determine probabilities</b>	
S-CP.9	Q.8.a	Use counting techniques to solve problems and determine combinations and permutations.	1-2
7.SP.7; 7.SP.8; S-CP.1; S-CP.2	Q.8.b	Determine the probability of simple and compound events.	1-2

17 See the Common Core State Standards for Mathematics at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed in the column.”

18 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) Depth of Knowledge model for cognitive complexity.

<b>Common Core State Standards References<sup>19</sup></b>		<b>Algebraic Problem Solving Assessment Targets Content Indicators</b>	<b>Range of Depth of Knowledge (DOK)<sup>20</sup></b>
	<b>A.1</b>	<b>Write, evaluate, and compute with expressions and polynomials</b>	
7.EE.1	A.1.a	Add, subtract, factor, multiply and expand linear expressions with rational coefficients.	1-2
6.EE.2	A.1.b	Evaluate linear expressions by substituting integers for unknown quantities.	1-2
6.EE.2; 6.EE.6	A.1.c	Write linear expressions as part of word-to-symbol translations or to represent common settings.	1-2
A-APR.1	A.1.d	Add, subtract, multiply polynomials, including multiplying two binomials, or divide factorable polynomials.	1-2
6.EE.2	A.1.e	Evaluate polynomial expressions by substituting integers for unknown quantities.	1-2
A-SSE.2; A-SSE.3; A-SSE.4	A.1.f	Factor polynomial expressions.	1-2
6.EE.2; 6.EE.6	A.1.g	Write polynomial expressions as part of word-to-symbol translations or to represent common settings.	1-2
6.EE.3	A.1.h	Add, subtract, multiply and divide rational expressions.	1-2
6.EE.2	A.1.i	Evaluate rational expressions by substituting integers for unknown quantities.	1-2
6.EE.2; 6.EE.6	A.1.j	Write rational expressions as part of word-to-symbol translations or to represent common settings.	1-2
	<b>A.2</b>	<b>Write, manipulate, and solve linear equations</b>	
7.EE.4; 8.EE.7; A-REI.3	A.2.a	Solve one-variable linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms or equations with coefficients represented by letters.	1-2
7.EE.4; A-CED.1; A-CED.2	A.2.b	Solve real-world problems involving linear equations.	1-2
6.EE.6; A-CED.1; A-CED.2	A.2.c	Write one-variable and multi-variable linear equations to represent context.	1-2
8.EE.6; A-REI.6	A.2.d	Solve a system of two simultaneous linear equations by graphing, substitution, or linear combination. Solve real-world problems leading to a system of linear equations.	1-2
	<b>A.3</b>	<b>Write, manipulate, solve, and graph linear inequalities</b>	
A-REI.3	A.3.a	Solve linear inequalities in one variable with rational number coefficients.	1-2
6.EE.8; 7.EE.4	A.3.b	Identify or graph the solution to a one variable linear inequality on a number line.	1-2
7.EE.4; A-CED.1; A-CED.2	A.3.c	Solve real-world problems involving inequalities.	1-2

19 See the Common Core State Standards for Mathematics at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed in the column.”

20 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) Depth of Knowledge model for cognitive complexity.

<b>Common Core State Standards References<sup>19</sup></b>		<b>Algebraic Problem Solving Assessment Targets Content Indicators</b>	<b>Range of Depth of Knowledge (DOK)<sup>20</sup></b>
6.EE.2; A-CED.1; A-CED.2	A.3.d	Write linear inequalities in one variable to represent context.	1-2
	<b>A.4</b>	<b>Write, manipulate, and solve quadratic equations</b>	
A-REI.4	A.4.a	Solve quadratic equations in one variable with rational coefficients and real solutions, using appropriate methods. (e.g., quadratic formula, completing the square, factoring, inspection)	1-2
A-CED.1	A.4.b	Write one-variable quadratic equations to represent context .	1-2
	<b>A.5</b>	<b>Connect and interpret graphs and functions</b>	
6.NS.6	A.5.a	Locate points in the coordinate plane.	1
8.F.4	A.5.b	Determine the slope of a line from a graph, equation, or table.	1-2
8.EE.5	A.5.c	Interpret unit rate as the slope in a proportional relationship.	2
A-CED.2; F-IF.7	A.5.d	Graph two-variable linear equations.	1-2
8.F.3; 8.F.5; F-IF.5	A.5.e	For a function that models a linear or nonlinear relationship between two quantities, interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior, and periodicity.	1-2
	<b>A.6</b>	<b>Connect coordinates, lines, and equations</b>	
A-CED.2	A.6.a	Write the equation of a line with a given slope through a given point.	1-2
A-CED.2	A.6.b	Write the equation of a line passing through two given distinct points.	2
G-GPE.5	A.6.c	Use slope to identify parallel and perpendicular lines and to solve geometric problems.	1-2
	<b>A.7</b>	<b>Compare, represent, and evaluate functions</b>	
8.EE.5	A.7.a	Compare two different proportional relationships represented in different ways. Examples include but are not limited to: compare a distance-time graph to a distance-time equation to determine which of two moving objects has a greater speed.	2
8.F.1; F-IF.1	A.7.b	Represent or identify a function in a table or graph as having exactly one output (one element in the range) for each input (each element in the domain).	1-2
F-IF.2	A.7.c	Evaluate linear and quadratic functions for values in their domain when represented using function notation.	1-2
8.F.2; F-IF.9	A.7.d	Compare properties of two linear or quadratic functions each represented in a different way (algebraically, numerically in tables, graphically or by verbal descriptions). Examples include but are not limited to: given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	2

19 See the Common Core State Standards for Mathematics at [www.corestandards.org](http://www.corestandards.org) for more information on the reference codes listed in the column.”

20 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) Depth of Knowledge model for cognitive complexity.

## Mathematical Practices

In addition to the content-based indicators, the GED® mathematics test will also focus on reasoning skills, as embodied by the GED® Mathematical Practices. The mathematical practices framework is based upon two sets of standards: the Standards for Mathematical Practice found in career- and college-readiness standards for mathematics; and the Process Standards found in the Principles and Standards for School Mathematics, published by the National Council of Teachers of Mathematics.

The content indicators and mathematical practices found in the GED® Mathematical Reasoning Assessment Targets, though related, each cover different aspects of item content considerations. The content indicators focus on mathematical content, as typically seen in state standards frameworks and, to some extent, the career- and college-readiness standards for mathematics. The indicators describe very specific skills and abilities of which test takers are expected to demonstrate mastery. In contrast, the mathematical practices focus more on mathematical reasoning skills and modes of thinking mathematically. Most of these skills are not content-specific, meaning that a mathematical practice indicator could be applied to items that cover a range of content domains (e.g. algebra, data analysis, number sense). The measurement of these skills is very much in keeping with the Common Core Standards for Mathematical Practice, which were created in order to “describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.”<sup>21</sup> The mathematical practices provide specifications for assessing real-world problem-solving skills in a mathematical context rather than requiring students only to memorize, recognize and apply a long list of mathematical algorithms.

While we consider it crucial to assess both content and reasoning, it would be unrealistic to assert that each individual item could address both types of skills. To be sure, there are inter-related concepts to be found in the content indicators and the mathematical practices, especially in the areas of modeling and fluency, but not every item assessing a content indicator will interact seamlessly with a mathematical practice. Rather than force alignments,

<sup>21</sup> Common Core State Standards for Mathematics (2010), p.6

we seek to create items in which content and practice mesh well together. These items would primarily assess practice, with content serving as the context in which the practice is applied. Items of this type reflect the reasoning and problem-solving skills that are so critical to college and career readiness. Where this type of natural overlap between practice and content is not possible, other items will assess the content indicators directly, thereby ensuring coverage of the full range of mathematical content on each test form.



References <sup>22</sup>	Mathematical Practices	Range of Depth of Knowledge (DOK) <sup>23</sup>
M1, M3, M4, M5 N2, N5, N6, N8	<b>MP.1 Building Solution Pathways and Lines of Reasoning</b> a. Search for and recognize entry points for solving a problem. b. Plan a solution pathway or outline a line of reasoning. c. Select the best solution pathway, according to given criteria. d. Recognize and identify missing information that is required to solve a problem. e. Select the appropriate mathematical technique(s) to use in solving a problem or a line of reasoning.	1-2 1-3 2-3 1-2 1-3
M2, M4 N2, N3	<b>MP.2 Abstracting Problems</b> a. Represent real world problems algebraically. b. Represent real world problems visually. c. Recognize the important and salient attributes of a problem.	1-2 1-2 2-3
M3 N7, N9	<b>MP.3 Furthering Lines of Reasoning</b> a. Build steps of a line of reasoning or solution pathway, based on previous step or givens. b. Complete the lines of reasoning of others. c. Improve or correct a flawed line of reasoning.	1-3 1-3 2-3
M2, M4, M6 N1, N2, N9	<b>MP.4 Mathematical Fluency</b> a. Manipulate and solve arithmetic expressions. b. Transform and solve algebraic expressions. c. Display data or algebraic expressions graphically.	1-2 1-2 1-2
M3 N7	<b>MP.5 Evaluating Reasoning and Solution Pathways</b> a. Recognize flaws in others' reasoning. b. Recognize and use counterexamples. c. Identify the information required to evaluate a line of reasoning.	2-3 2-3 2-3

22 The GED Mathematics Practices (MP#) are derived from the Common Core State Standards Math Practices (M#) and National Council of Teachers of Mathematics' Principles and Standards for School Mathematics (N#).

23 The Depth of Knowledge (DOK) levels correspond to Norman Webb's (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

## 2014 GED® Test Mathematics Formula Sheet<sup>24</sup>

<b>Area of a:</b>		
square	$A = s^2$	
rectangle	$A = lw$	
parallelogram	$A = bh$	
triangle	$A = \frac{1}{2}bh$	
trapezoid	$A = \frac{1}{2}h(b_1 + b_2)$	
circle	$A = \pi r^2$	
<b>Perimeter of a:</b>		
square	$P = 4s$	
rectangle	$P = 2l + 2w$	
triangle	$P = s_1 + s_2 + s_3$	
Circumference of a circle	$C = 2\pi r$ OR $C = \pi d$ ; $\pi \approx 3.14$	
<b>Surface area and volume of a:</b>		
rectangular/right prism	$SA = ph + 2B$	$V = Bh$
cylinder	$SA = 2\pi rh + 2\pi r^2$	$V = \pi r^2 h$
pyramid	$SA = \frac{1}{2}ps + B$	$V = \frac{1}{3}Bh$
cone	$SA = \pi rs + \pi r^2$	$V = \frac{1}{3}\pi r^2 h$
sphere	$SA = 4\pi r^2$	$V = \frac{4}{3}\pi r^3$
	$(p = \text{perimeter of base with area } B; \pi \approx 3.14)$	
<b>Data</b>		
mean	mean is equal to the total of the values of a data set, divided by the number of elements in the data set	
median	median is the middle value in an odd number of ordered values of a data set, or the mean of the two middle values in an even number of ordered values in a data set	
<b>Algebra</b>		
slope of a line	$m = \frac{y_2 - y_1}{x_2 - x_1}$	
slope-intercept form of the equation of a line	$y = mx + b$	
point-slope form of the equation of a line	$y - y_1 = m(x - x_1)$	
standard form of a quadratic equation	$y = ax^2 + bx + c$	
quadratic formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	
Pythagorean theorem	$a^2 + b^2 = c^2$	
simple interest	$I = Prt$ $(I = \text{interest, } P = \text{principal, } r = \text{rate, } t = \text{time})$	
distance formula	$d = rt$	
total cost	total cost = (number of units) $\times$ (price per unit)	

24 The Mathematics Formula Sheet contains basic, essential information necessary for answering items on the Mathematics test. It will be available to test-takers during the entire Mathematics Test.

## Science Assessment Targets

### Content Specifications for the GED® Science Test

The GED® Science Test will focus on the fundamentals of science reasoning, striking a balance of deeper conceptual understanding, procedural skill and fluency, and the ability to apply these fundamentals in realistic situations. In order to stay true to this intention, each item on the Science Test will be aligned to one *science practice* and one *content topic*.

The science practices can be described as skills that are key to scientific reasoning in both textual and quantitative contexts. The science practices are derived from important skills enumerated in the career- and college-readiness standards as well as in The National Research Council’s Framework for K-12 Science Education.

The Science Test will also focus on three major content domains: life science, physical science, and Earth and space science. The science content topics, which are drawn from these three domains, will provide context for measuring a test-taker’s abilities to apply the reasoning skills described in the practices. The content topics focus on science that reflects both that which is taught in many high school-level science courses and that which is most relevant and useful for an adult population. To measure this content at a range of levels of complexity, several different item types will be used in the test, including multiple choice, short answer, drag-and-drop, hot spot, and fill-in-the-blank.

Given these priorities, the GED® Science Test adheres to the following parameters:

1. Approximately 40 percent of the test will focus on life science, roughly 40 percent will focus on physical science, and approximately 20 percent will focus Earth and space science.
2. The test will include items that test textual analysis and understanding, data representation and inference skills, as well as problem solving with science content.
3. Each item on the Science Test will be aligned to both one science practice and one content topic.



### About the assessment:

The science assessment targets are divided into two sections: the practices and the content topics. The science practices describe skills necessary for reasoning in a scientific context, while the content topics describe a body of knowledge typical of what is taught in American high schools. Items on the GED® Science Test will be aligned to one science practice indicator and one content subtopic each.



- 4. Each item will also be aligned to one Depth of Knowledge level of cognitive complexity, based on the appropriate alignment to a science practice.
- 5. Approximately 80 percent of the items will be written to a Depth of Knowledge level of 2 or 3; DOK level 4 is beyond the scope of the GED® test.
- 6. The contexts within which problem solving skills will be measured will be taken from both academic and workforce contexts.
- 7. Approximately 50 percent of the items will be presented in item scenarios, in which a single stimulus (which may be textual, graphic or a combination of both) serves to inform two to three items. The rest of the items will be discrete (i.e. standalone) items.



**About the assessment:**

Each science practice in the Science Assessment Targets correspond with standards from Common Core State Standards (CCSS) for Literacy in Science & Technical Subjects, and mathematics and/or practices from *A Framework for K-12 Science Education*.

For example, R.1 corresponds with CCSS Reading Anchor Standard 1m and 8.SP refers to skills introduced in the CCSS Grade 8 Statistics and Probability mathematics domain. Practices 1-8, however, are drawn from the scientific practices in *A Framework for K-12 Science Education*.

Click for more information about:

[Common Core Standards for ELA and Literacy](#)

[Common Core State Standards for Mathematics](#)

[Scientific Practices in A Framework for K-12 Science Education](#)

References to Common Core State Standards and Framework for K-12 Science Education <sup>25</sup>	Science Practices	Range of Depth of Knowledge (DOK) levels <sup>26</sup>
R2, R8, P8, M2, M6 R4, L4, P8,M2, M4, M6 S-ID, 8.SP, P8, M2, M4, M6	<b>SP.1 Comprehending Scientific Presentations</b> SP.1.a Understand and explain textual scientific presentations SP.1.b Determine the meaning of symbols, terms and phrases as they are used in scientific presentations SP.1.c Understand and explain a non-textual scientific presentations	1-3 2 2
R8, P3, P4, M4 R2, R5, W5, P1, P8. M, M4, M8 R8, R9, P2, P5, M3, M4 W7, 3.MD, P3, P5, M4, M8 R5, P2, P4, M4	<b>SP.2 Investigation Design (Experimental and Observational)</b> SP.2.a Identify possible sources of error and alter the design of an investigation to ameliorate that error SP.2.b Identify and refine hypotheses for scientific investigations SP.2.c Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs SP.2.d Design a scientific investigation SP.2.e Identify and interpret independent and dependent variables in scientific investigations	2-3 2-3 2-3 1-3 2-3
R1, P7, R1, R2, R3, P1, P6, P7, M3, M4, M7, M8 R1, R3, P4, M3, M4, M7, M8 S-CP, 7.SP, P4, P5, M4, M7, M8	<b>SP.3 Reasoning from Data</b> SP.3.a Cite specific textual evidence to support a finding or conclusion SP.3.b Reason from data or evidence to a conclusion SP.3.c Make a prediction based upon data or evidence SP.3.d Using sampling techniques to answer scientific questions	2-3 2-3 2-3 2-3
R8, P4, P6, M3, M7, M8	<b>SP.4 Evaluating Conclusions with Evidence</b> SP.4.a Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence	2-3
R9, P2, P4, P6, M3, M7	<b>SP.5 Working with Findings</b> SP.5.a Reconcile multiple findings, conclusions or theories.	2-3
R7, W2, P8, M2, M4, M6 R7, W2, P5, P8, M2, M4, M6 R7, W2, P8, M2, M6	<b>SP.6 Expressing Scientific Information</b> SP.6.a Express scientific information or findings visually SP.6.b Express scientific information or findings numerically or symbolically. SP.6.c Express scientific information or findings verbally	2 1-2 2-3

25 The GED® Science Practices (SP#) are derived from The Common Core State Standards for ELA and Literacy (R#) (L#) (W#)(2010), The Common Core State Standards for Mathematics (M#) (2010), and the National Research Council’s A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas (P#) (forthcoming).

26 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) *Depth of Knowledge* model of cognitive complexity.

References to Common Core State Standards and Framework for K-12 Science Education <sup>25</sup>	Science Practices	Range of Depth of Knowledge (DOK) levels <sup>26</sup>
R3, R5, L3, P1, P2, P7, M2, M4 P2, P5, M2, M4, M8	<b>SP.7 Scientific Theories</b> SP.7.a Understand and apply scientific models, theories and processes SP.7.b Apply formulas from scientific theories	2-3 2
S-MD, S-ID, P4, P5, M4, M6 7.SP, P5, M4, M6 7.SP, S-CP, P5, M4, M6	<b>SP.8 Probability &amp; Statistics</b> SP.8.a Describe a data set statistically SP.8.b Use counting and permutations to solve scientific problems SP.8.c Determine the probability of events	1-2 1-2 2

• To learn more about the reference column, see Appendix B.

25 The GED® Science Practices (SP#) are derived from The Common Core State Standards for ELA and Literacy (R#) (L#) (W#)(2010), The Common Core State Standards for Mathematics (M#) (2010), and the National Research Council’s A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas (P#) (forthcoming).

26 The Depth of Knowledge (DOK) levels correspond to Norman Webb’s (University of Wisconsin) *Depth of Knowledge* model of cognitive complexity.

## 2014 GED® Test Science Content Topics

The science content topics describe key concepts that are widely taught in a variety of high school-level courses and are relevant to the lives of GED® test-takers. The content topics are designed to provide context for measuring the skills defined in the science practices section of this document.

As in the previous version of the GED® Science Assessment Targets, the science practices maintain a close relationship with the science content topics. More specifically, the primary focus of the GED Science Test continues to be the measurement of essential reasoning skills applied in scientific context. However, test-takers should still be broadly and generally familiar with each of the basic concepts enumerated in the science content topics and subtopics, and they should be able to recognize and understand, in context, each of the terms listed there. Nevertheless, test-takers are not expected to have an in-depth and comprehensive knowledge of each subtopic. Rather, the stimuli about which each question pertains will provide necessary details about scientific figures, formulas, and other key principles. For example, a question may include answer options and stimuli that contain specific terms drawn from the content subtopics; however, test-takers will never be asked to formulate their own definition a term without the item providing sufficient contextual support for such a task.

### Focusing Themes

These themes have been selected to ensure that the test covers a wide range of important scientific topics, but they are also intended to function like a lens by drawing focus to a distinct subset of ideas within each content topic. That is, items from any of the three content domains of life science, physical science, and Earth and space science can pertain to one of these two themes, but content that falls outside the spheres of these themes will not appear on the Science Test.

- **Human Health and Living Systems**, the first focusing theme, pertains to material that is vital for the health and safety of all living things on the planet. Topics explored in this area of focus include the physical body and characteristics of humans and other living things. System of living organisms and related topics (e.g. diseases, evolution, and heredity) are also

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“The focusing themes function like a lens by drawing focus to a distinct subset of ideas within each content topic.”

covered. This crosscutting concept also examines the mechanisms for how the human body works on chemical and physical levels. Within the domain of Earth and space science, topics are focused on how the environment affects living things and human society, as well as on how humans and other organisms affect the environment.

- Energy and Related Systems**, the second focusing theme, deals with a fundamental part of the universe. Topics in this area of focus will cover sources of energy, transformations of energy, and uses of energy. Within the domain of life science, this theme will be reflected in content exploring how energy flows through organisms and ecosystems. Similarly, the Earth’s geochemical systems will be touched upon in Earth and space science. Topics related to how humans gain energy in their bodies and the results of the use of that energy are also relevant to this theme.

The Science Content Topics Matrix below identifies the major topics in science and shows the relationship between each content topic and each focusing theme.

### Science Content Topics Matrix

		Science Content Topics		
		Life Science (L) (40%)	Physical Science (P) (40%)	Earth and Space Science (ES) (20%)
<b>Focusing Themes</b>	<b>Human Health and Living Systems</b>	a. Human body and health b. Organization of life (structure and function of life) c. Molecular basis for heredity d. Evolution	a. Chemical Properties and Reactions Related to Human Systems	a. Interactions between Earth’s systems and living things
	<b>Energy and Related Systems</b>	e. Relationships between life functions and energy intake f. Energy flows in ecologic networks (ecosystems)	b. Conservation, transformation, and flow of energy c. Work, motion, and forces	b. Earth and its system components and interactions c. Structure and organization of the cosmos

The science content topics and subtopics tables on the following pages break down each content topic into greater detail. Individual test items will be drawn from the subtopics.



### Science Content Topics and Subtopics<sup>27</sup>

<b>Life Science</b>	
L.a	<p><b>Human Body and Health</b></p> <p>L.a.1 Body systems (e.g. muscular, endocrine, nervous systems) and how they work together to perform a function (e.g. muscular and skeletal work to move the body)</p> <p>L.a.2 Homeostasis, feedback methods that maintain homeostasis (e.g. sweating to maintain internal temperature), and effects of changes in the external environment on living things (e.g. hypothermia, injury)</p> <p>L.a.3 Sources of nutrients (e.g. foods, symbiotic organisms) and concepts in nutrition (e.g. calories, vitamins, minerals)</p> <p>L.a.4 Transmission of disease and pathogens (e.g. airborne, bloodborne), effects of disease or pathogens on populations (e.g. demographics change, extinction), and disease prevention methods (e.g. vaccination, sanitation)</p>
L.b	<p><b>Relationship Between Life Functions and Energy Intake</b></p> <p>L.b.1 Energy for life functions (e.g. photosynthesis, respiration, fermentation)</p>
L.c	<p><b>Energy Flows in Ecologic Networks (Ecosystems)</b></p> <p>L.c.1 Flow of energy in ecosystems (e.g. energy pyramids), conservation of energy in an ecosystem (e.g. energy lost as heat, energy passed on to other organisms) and sources of energy (e.g. sunlight, producers, lower level consumer)</p> <p>L.c.2 Flow of matter in ecosystems (e.g. food webs and chains, positions of organisms in the web or chain) and the effects of change in communities or environment on food webs</p> <p>L.c.3 Carrying capacity, changes in carrying capacity based on changes in populations and environmental effects and limiting resources to necessary for growth</p> <p>L.c.4 Symbiosis (e.g. mutualism, parasitism, commensalism) and predator/prey relationships (e.g. changes in one population affecting another population)</p> <p>L.c.5 Disruption of ecosystems (e.g. invasive species, flooding, habitat destruction, desertification) and extinction (e.g. causes [human and natural] and effects)</p>
L.d	<p><b>Organization of Life (Structure and Function of Life)</b></p> <p>L.d.1 Essential functions of life (e.g. chemical reactions, reproduction, metabolism) and cellular components that assist the functions of life (e.g. cell membranes, enzymes, energy)</p> <p>L.d.2 Cell theory (e.g. cells come from cells, cells are the smallest unit of living things), specialized cells and tissues (e.g. muscles, nerve, etc.) and cellular levels of organization (e.g. cells, tissues, organs, systems)</p> <p>L.d.3 Mitosis, meiosis (e.g. process and purpose)</p>

<sup>27</sup> The GED® Science Content Topics are informed by the National Research Council’s *A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas* 2011.

<b>Life Science</b>	
L.e	<p><b>Molecular Basis for Heredity</b></p> <p>L.e.1 Central dogma of molecular biology, the mechanism of inheritance (e.g. DNA) and chromosomes (e.g. description, chromosome splitting during Meiosis)</p> <p>L.e.2 Genotypes, phenotypes and the probability of traits in close relatives (e.g. Punnett squares, pedigree charts)</p> <p>L.e.3 New alleles, assortment of alleles (e.g. mutations, crossing over), environmental altering of traits, and expression of traits (e.g. epigenetics, color-points of Siamese cats)</p>
L.f	<p><b>Evolution</b></p> <p>L.f.1 Common ancestry (e.g. evidence) and cladograms (e.g. drawing, creating, interpreting)</p> <p>L.f.2 Selection (e.g. natural selection, artificial selection, evidence) and the requirements for selection (e.g. variation in traits, differential survivability)</p> <p>L.f.3 Adaptation, selection pressure, and speciation</p>

<b>Physical Science</b>	
P.a	<p><b>Conservation, Transformation, and Flow of Energy</b></p> <p>P.a.1 Heat, temperature, the flow of heat results in work and the transfer of heat (e.g. conduction, convection)</p> <p>P.a.2 Endothermic and exothermic reactions</p> <p>P.a.3 Types of energy (e.g. kinetic, chemical, mechanical) and transformations between types of energy (e.g. chemical energy [sugar] to kinetic energy [motion of a body])</p> <p>P.a.4 Sources of energy (e.g. sun, fossil fuels, nuclear) and the relationships between different sources (e.g. levels of pollutions, amount of energy produced)</p> <p>P.a.5 Types of waves, parts of waves (e.g. frequency, wavelength), types of electromagnetic radiation, transfer of energy by waves, and the uses and dangers of electromagnetic radiation (e.g. radio transmission, UV light and sunburns)</p>
P.b	<p><b>Work, Motion, and Forces</b></p> <p>P.b.1 Speed, velocity, acceleration, momentum, and collisions (e.g. inertia in a car accident, momentum transfer between two objects)</p> <p>P.b.2 Force, Newton’s Laws, gravity, acceleration due to Gravity (e.g. freefall, law of gravitational attraction), mass and weight</p> <p>P.b.3 Work, simple machines (types and functions), mechanical advantages (force, distance, and simple machines), and power</p>
P.c	<p><b>Chemical Properties and Reactions Related to Living Systems</b></p> <p>P.c.1 Structure of matter</p> <p>P.c.2 Physical and chemical properties, changes of state, and density</p> <p>P.c.3 Balancing chemical equations and different types of chemical equations, conservation of mass in balanced chemical equations and limiting reactants</p> <p>P.c.4 Parts in solutions, general rules of solubility (e.g. hotter solvents allow more solute to dissolve), saturation and the differences between weak and strong solutions</p>

<b>Earth and Space Science</b>	
ES.a	<p><b>Interactions between Earth’s Systems and Living Things</b></p> <p>ES.a.1 Interactions of matter between living and non-living things (e.g. cycles of matter) and the location, uses and dangers of fossil fuels</p> <p>ES.a.2 Natural Hazards (e.g. earthquakes, hurricanes, etc.) their effects (e.g. frequency, severity, and short- and long-term effects), and mitigation thereof (e.g. dikes, storm shelters, building practices)</p> <p>ES.a.3 Extraction and use of natural resources, renewable vs. non-renewable resources and sustainability</p>
ES.b	<p><b>Earth and its System Components and Interactions</b></p> <p>ES.b.1 Characteristics of the atmosphere, including its layers, gases and their effects on the Earth and its organisms, including climate change</p> <p>ES.b.2 Characteristics of the oceans (e.g. salt water, currents, coral reefs) and their effects on Earth and organisms</p> <p>ES.b.3 Interactions between Earth’s systems (e.g. weathering caused by wind or water on rock, wind caused by high/low pressure and Earth rotation, etc.)</p> <p>ES.b.4 Interior structure of the Earth (e.g. core, mantle, crust, tectonic plates) and its effects (e.g. volcanoes, earth quakes, etc.) and major landforms of the Earth (e.g. mountains, ocean basins, continental shelves, etc.)</p>
ES.c	<p><b>Structures and Organization of the Cosmos</b></p> <p>ES.c.1 Structures in the universe (e.g. galaxies, stars, constellations, solar systems), the age and development of the universe, and the age and development of Stars (e.g. main sequence, stellar development, deaths of stars [black hole, white dwarf])</p> <p>ES.c.2 Sun, planets, and moons (e.g. types of planets, comets, asteroids), the motion of the Earth’s motion and the interactions within the Earth’s solar system (e.g. tides, eclipses)</p> <p>ES.c.3 The age of the Earth, including radiometrics, fossils, and landforms</p>



## Social Studies Assessment Targets

### Content Specifications for the GED® Social Studies Test

The GED® Social Studies Test will focus on the fundamentals of social studies reasoning, striking a balance of deeper conceptual understanding, procedural skill and fluency, and the ability to apply these fundamentals in realistic situations. In order to stay true to this intention, each item on the Social Studies Test will be aligned to one *social studies practice* and one *content topic*.

The social studies practices can be described as skills that are key to scientific reasoning in both textual and quantitative contexts. The practices come from important skills specified in career- and college-readiness standards, as well as in National Standards for History.

The Social Studies Test will also focus on four major content domains: civics and government, United States history, economics, and geography and the world. The social studies content topics, which are drawn from these four domains, will provide context for measuring a test-taker’s ability to apply the reasoning skills described in the practices. The content topics focus on key concepts that reflect both that which is taught in many high-school-level social sciences courses and that which is most relevant and useful for an adult population.

To measure this content at a range of levels of complexity, several different item types will be used in the test, including multiple choice, drag-and-drop, hot spot, and fill-in-the-blank. Additionally, the Social Studies Test will feature one extended-response task that will require test-takers to analyze arguments and use evidence found within brief excerpts from primary and secondary source texts.

Given these priorities, the GED® Social Studies Test adheres to the following parameters:

1. Approximately 50 percent focuses on civics and government, 20 percent focuses on United States history, 15 percent focuses on economics, and 15 percent focuses on geography and the world.



### About the assessment:

The social studies assessment targets are divided into two sections: the *practices* and the *content topics*. The social studies practices describe skills necessary for reasoning in a social sciences context, while the content topics describe a body of knowledge typical of what is taught in American high schools.



### Primary sources are artifacts,

documents, or other sources of information that were created by someone with direct knowledge of an issue, or in the time period being studied. Primary sources serve as original sources of information about the topic.

A **secondary source** is a document or other source of information that cites, comments on, or builds upon primary sources.

- 2. The test includes items that assess textual analysis and understanding, data representation and inference skills, and problem solving using social studies content.
- 3. Social Studies Test items align to one social studies practice and one content topic.
- 4. Each item aligns to one DOK level, based on appropriate alignment to social studies practice.
- 5. Approximately 80 percent of the test items will be written to DOK level 2 or 3; DOK level 4 is beyond the scope of the GED® test.
- 6. Problem-solving skills will be measured in both academic and workplace contexts.
- 7. Approximately 50 percent of the test items will be based on scenarios in which a single stimulus (textual, graphic or a combination of both) serves to inform two or three items; the remaining approximately 50 percent of the items will be discrete (i.e. standalone) items.



**About the assessment:**

Each social studies practice in the Social Studies Assessment Targets corresponds with the Common Core State Standards (CCSS) for Literacy in History/ Social Studies, the CCSS for Mathematics, *NCSS National Curriculum Standards for Social Studies*, as well as *National Standards for History*.

For example, R.1 refers to CCSS Reading Anchor Standard 1 and 8.SP refers to CCSS Grade 8 Statistics and Probability standards. Similarly, NSH 3.F is drawn from the National Standards for History's (ital.) Historical Thinking Standard 3. Also, the NCSS literacy skills references pertain to a subset of the NCSS National Curriculum Standards.

Click for more information:

[Common Core Standards for ELA and Literacy](#)

[Common Core State Standards for Mathematics](#)

[National Standards for History](#)

[NCSS National Curriculum Standards](#)

References to Common Core State Standards, NCSS and NSH <sup>28</sup>	Social Studies Practices	Range of Depth of Knowledge (DOK) levels <sup>29</sup>
R.1, R.8	<p><b>SSP.1 Drawing Conclusions and Making Inferences</b></p> <p>a. Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence.</p> <p>b. Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.</p>	<p>2-3</p> <p>1-3</p>
R.2, NCSS Literacy Skills	<p><b>SSP.2 Determining Central Ideas, Hypotheses and Conclusions</b></p> <p>a. Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence.</p> <p>b. Describe people, places, environments, processes, and events, and the connections between and among them.</p>	<p>1-3</p> <p>2-3</p>
R.3, R.8	<p><b>SSP.3 Analyzing Events and Ideas</b></p> <p>a. Identify the chronological structure of a historical narrative and sequence steps in a process.</p> <p>b. Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.</p> <p>c. Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.</p> <p>d. Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.</p>	<p>1-2</p> <p>2-3</p> <p>2-3</p> <p>2-3</p>
R.4.2, L.4.2.	<p><b>SSP.4 Interpreting Meaning of Symbols, Words and Phrases</b></p> <p>a. Determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies.</p>	<p>1-3</p>
R.6, NSH 3.F	<p><b>SSP.5 Analyzing Purpose and Point of View</b></p> <p>a. Identify aspects of a historical document that reveal an author’s point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).</p> <p>b. Identify instances of bias or propagandizing.</p> <p>c. Analyze how a historical context shapes an author’s point of view.</p> <p>d. Evaluate the credibility of an author in historical and contemporary political discourse.</p>	<p>2</p> <p>2-3</p> <p>2-3</p> <p>2-3</p>

28 The GED® Social Studies practices are derived from the Common Core State Standards for ELA and Literacy (R#) (L#) (2010), the Common Core State Standards for Mathematics (N#) (O#) (P#) (Q#) (RP#) (S-ID#) (S-MD#) (S-SP#) (2010), NCSS National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment (NCSS Literacy Skills) (2010), and National Standards for History Revised Edition (NSH#) (1996).

29 The Depth of Knowledge (DOK) levels correspond with Norman Webb’s (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

References to Common Core State Standards, NCSS and NSH <sup>28</sup>	Social Studies Practices	Range of Depth of Knowledge (DOK) levels <sup>29</sup>
R.9.1, R.7.1, R.7.2, Q7: 7.RP, 3.MD.3, S-ID.1, 8.SP.1, S-ID.6, S-ID.7, NSH 2,	<b>SSP.6 Integrating Content Presented in Different Ways</b> a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text. b. Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons. c. Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words.	2-3  2-3  1-3
R.8, NSH 3.E	<b>SSP.7 Evaluating Reasoning and Evidence</b> a. Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document. b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.	2-3  2-3
R.9, R.7	<b>SSP.8 Analyzing Relationships between Texts</b> a. Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.	2-3
R.1, W.1, W.2, W.4, W.5, L.1, L.2, L.4	<b>SSP.9 Writing Analytic Response to Source Texts<sup>30</sup></b> a. Produce writing that develops the idea(s), claim(s) and/or argument(s) thoroughly and logically, with well-chosen examples, facts, or details from primary and secondary source documents. b. Produce writing that introduces the idea(s) or claim(s) clearly; creates an organization that logically sequences information; and maintains a coherent focus. c. Write clearly and demonstrate sufficient command of standard English conventions.	2-3  2-3  1-2
Q7: 7.RP, 3.MD.3, S-ID.1, 8.SP.1, S-ID.6, S-ID.7	<b>SSP.10 Reading and Interpreting Graphs, Charts and Other Data Representation</b> a. Interpret, use, and create graphs (e.g., scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g., do not extend trend beyond a reasonable limit). b. Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related. c. Distinguish between correlation and causation.	2-3  2-3  1-3
Q8: 6.SP.3, S-MD.2, 6.SP.2, 6.SP.5., S-ID.2, S-ID.3, S-ID.4, S-ID.9	<b>SSP.11 Measuring the Center of a Statistical Dataset</b> a. Calculate the mean, median, mode, and range of a dataset.	1

• To learn more about the reference column, see Appendix C.

28 The GED® Social Studies practices are derived from the Common Core State Standards for ELA and Literacy (R#) (L#) (2010), the Common Core State Standards for Mathematics (N#) (O#) (P#) (Q#) (RP#) (S-ID#) (S-MD#) (S-SP#) (2010), NCSS National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment (NCSS Literacy Skills) (2010), and National Standards for History Revised Edition (NSH#) (1996).

29 The Depth of Knowledge (DOK) levels correspond with Norman Webb’s (University of Wisconsin) Depth of Knowledge model of cognitive complexity.

30 The Extended Response writing task will require test-takers to apply a range of Social Studies Practices; however, the practices under SSP.9 will be of primary importance in the writing task, and these practices will only be assessed through the writing task.

### Social Studies Content Topics

The social studies content topics describe key concepts that are widely taught in a variety of high-school level social studies courses and are relevant to the lives of GED® test-takers. They focus, in particular, on American civics and government. They are designed to provide context for measuring the skills defined in the social studies practices section of this document.

The social studies practices maintain a close relationship with the social studies content topics. More specifically, the primary focus of the GED® Social Studies Test continues to be the measurement of essential reasoning skills applied in a social studies context. However, test-takers should still be broadly and generally familiar with each of the basic concepts enumerated in the social studies content topics and subtopics, and they should be able to recognize and understand, in context, each of the terms listed there. Nevertheless, test-takers are not expected to have an in-depth and comprehensive knowledge of each subtopic. Rather, the stimuli about which each question pertains will provide necessary details about social studies-related figures, events, processes, and concepts. For example, a question may include answer options and stimuli that contain specific terms drawn from the content subtopics; however, test-takers will never be asked to formulate their own definition a term without the item providing sufficient contextual support for such a task.

### Focusing Themes

The content topics for the Social Studies Test focus on two main themes, each applied across the four domains in the social studies arena (i.e. civics and government, U.S. history, economics, and geography and the world). These themes have been selected to ensure that the test covers a wide range of important concepts and ideas in social studies, but they are also intended to function like a lens to draw focus to a distinct subset of ideas within each content topic. Content that falls outside the parameters of these themes will not be included in the new Social Studies Test.

- **Development of Modern Liberties and Democracy**, the first theme, explores the development of current ideas about democracy as well as human and civil rights

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“The focusing themes function like a lens by drawing focus to a distinct subset of ideas within each content topic.”

from ancient civilizations to the present. It examines contemporary thinking, policies and structures, major events that have shaped our democratic values, and major thinkers who contributed to American ideas of democratic government.

- **Dynamic Responses in Societal Systems**, the second theme, explores how the systems, structures and policies that people have created respond to each other, conditions, and events. For example, societies and civilizations have developed and changed in response to particular geographic features and natural events. National economies respond to both governmental policies and natural laws of economics—such as supply and demand—around which policies are built. Similarly, countries respond to both internal and external changes and challenges in ways that are beyond the ability of any one person to control.

The Social Studies Content Topics Matrix below identifies the major topics in social studies and shows the relationship between each content topic and each focusing theme. Each content topic in the matrix below contains a broad range of ideas. Additionally, each topic is aligned to a particular theme. The distribution of content across the themes is likely to vary, as the Development of Modern Liberties and Democracy theme easily lends itself to ideas relevant to civics and government as well as U.S. history, whereas the Dynamic Responses in Societal Systems is more closely tied to topics in economics and geography and the world.



Focusing Themes	Social Studies Topic Matrix			
	CG: Civics and Government (50%)	USH: U.S. History (20%)	E: Economics (15%)	G: Geography and the World (15%)
<b>I. Development of Modern Liberties and Democracy</b>	<ul style="list-style-type: none"> <li>a. Types of modern and historical governments</li> <li>b. Principles that have contributed to development of American constitutional democracy</li> <li>c. Structure and design of United States government</li> <li>d. Individual rights and civic responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>a. Key historical documents that have shaped American constitutional government</li> <li>b. Revolutionary and Early Republic Periods</li> <li>c. Civil War &amp; Reconstruction</li> <li>d. Civil Rights Movement</li> </ul>	<ul style="list-style-type: none"> <li>a. Key economic events that have shaped American government and policies</li> <li>b. Relationship between political and economic freedoms</li> </ul>	<ul style="list-style-type: none"> <li>a. Development of classical civilizations</li> </ul>
<b>II. Dynamic Responses in Societal Systems</b>	<ul style="list-style-type: none"> <li>e. Political parties, campaigns, and elections in American politics</li> <li>f. Contemporary public policy</li> </ul>	<ul style="list-style-type: none"> <li>e. European population of the Americas</li> <li>f. World War I &amp; II</li> <li>g. The Cold War</li> <li>h. American foreign policy since 9/11</li> </ul>	<ul style="list-style-type: none"> <li>c. Fundamental economic concepts</li> <li>d. Microeconomics and macroeconomics</li> <li>e. Consumer economics</li> <li>f. Economic causes and impacts of wars</li> <li>g. Economic drivers of exploration and colonization</li> <li>h. Scientific and Industrial Revolutions</li> </ul>	<ul style="list-style-type: none"> <li>b. Relationships between the environment and societal development</li> <li>c. Borders between peoples and nations</li> <li>d. Human migration</li> </ul>

The social studies content topics and subtopics table that follows breaks down each topic into greater detail. Individual test items will be drawn from the subtopics.



**Social Studies Content Topics and Subtopics**

<b>Civics and Government</b>	
CG.a	<p><b>Types of modern and historical governments</b></p> <p>CG.a.1 Direct democracy, representative democracy, parliamentary democracy, presidential democracy, monarchy and others types of government that contributed to the development of American constitutional democracy</p>
CG.b	<p><b>Principles that have contributed to development of American constitutional democracy</b></p> <p>CG.b.1 Natural rights philosophy</p> <p>CG.b.2 Popular sovereignty and consent of the governed</p> <p>CG.b.3 Constitutionalism</p> <p>CG.b.4 Majority rule and minority rights</p> <p>CG.b.5 Checks and balances</p> <p>CG.b.6 Separation of powers</p> <p>CG.b.7 Rule of law</p> <p>CG.b.8 Individual rights</p> <p>CG.b.9 Federalism</p>
CG.c	<p><b>Structure and design of United States government</b></p> <p>CG.c.1 Structure, powers, and authority of the federal executive, judicial, and legislative branches</p> <p>CG.c.2 Individual governmental positions (e.g. president, speaker of the house, cabinet secretary, etc.)</p> <p>CG.c.3 Major powers and responsibilities of the federal and state governments</p> <p>CG.c.4 Shared powers</p> <p>CG.c.5 The amendment process</p> <p>CG.c.6 Governmental departments and agencies</p>
CG.d	<p><b>Individual rights and civic responsibilities</b></p> <p>CG.d.1 The Bill of Rights</p> <p>CG.d.2 Personal and civil liberties of citizens</p>
CG.e	<p><b>Political parties, campaigns, and elections in American politics</b></p> <p>CG.e.1 Political parties</p> <p>CG.e.2 Interest groups</p> <p>CG.e.3 Political campaigns, elections and the electoral process</p>
CG.f	<p><b>Contemporary Public Policy</b></p>



<b>United States History</b>	
USH.a	<p><b>Key historical documents that have shaped American constitutional government</b></p> <p>USH.a.1 Key documents and the context and ideas that they signify (e.g. Magna Carta, Mayflower Compact, Declaration of Independence, United States Constitution, Martin Luther King’s Letter from the Birmingham Jail, landmark decisions of the United States Supreme Court, and other key documents)</p>
USH.b	<p><b>Revolutionary and Early Republic Periods</b></p> <p>USH.b.1 Revolutionary War</p> <p>USH.b.2 War of 1812</p> <p>USH.b.3 George Washington</p> <p>USH.b.4 Thomas Jefferson</p> <p>USH.b.5 Articles of Confederation</p> <p>USH.b.6 Manifest Destiny</p> <p>USH.b.7 U.S. Indian Policy</p>
USH.c	<p><b>Civil War and Reconstruction</b></p> <p>USH.c.1 Slavery</p> <p>USH.c.2 Sectionalism</p> <p>USH.c.3 Civil War Amendments</p> <p>USH.c.4 Reconstruction policies</p>
USH.d	<p><b>Civil Rights</b></p> <p>USH.d.1 Jim Crow laws</p> <p>USH.d.2 Women’s suffrage</p> <p>USH.d.3 Civil Rights Movement</p> <p>USH.d.4 Plessy vs. Ferguson and Brown vs. Board of Education</p> <p>USH.d.5 Warren court decisions</p>
USH.e	<p><b>European settlement and population of the Americas</b></p>

<b>United States History</b>	
USH.f	<p><b>World Wars I &amp; II</b></p> <p>USH.f.1 Alliance system</p> <p>USH.f.2. Imperialism, nationalism, and militarism</p> <p>USH.f.3 Russian Revolution</p> <p>USH.f.4 Woodrow Wilson</p> <p>USH.f.5 Treaty of Versailles and League of Nations</p> <p>USH.f.6 Neutrality Acts</p> <p>USH.f.7 Isolationism</p> <p>USH.f.8 Allied and Axis Powers</p> <p>USH.f.9 Fascism, Nazism, and totalitarianism</p> <p>USH.f.10 The Holocaust</p> <p>USH.f.11 Japanese-American internment</p> <p>USH.f.12 Decolonization</p> <p>USH.f.13 GI Bill</p>
USH.g	<p><b>The Cold War</b></p> <p>USH.g.1 Communism and capitalism</p> <p>USH.g.2 NATO and the Warsaw Pact</p> <p>USH.g.3 U.S. maturation as an international power</p> <p>USH.g.4 Division of Germany, Berlin Blockade and Airlift</p> <p>USH.g.5 Truman Doctrine</p> <p>USH.g.6 Marshall Plan</p> <p>USH.g.7 Lyndon B. Johnson and The Great Society</p> <p>USH.g.8 Richard Nixon and the Watergate scandal</p> <p>USH.g.9 Collapse of U.S.S.R. and democratization of Eastern Europe</p>
USH.h	<p><b>American foreign policy since 9/11</b></p>

<b>Economics</b>	
E.a	<b>Key economic events that have shaped American government and policies</b>
E.b	<b>Relationship between political and economic freedoms</b>
E.c	<b>Fundamental Economic Concepts</b> E.c.1 Markets E.c.2 Incentives E.c.3 Monopoly and competition E.c.4 Labor and capital E.c.5 Opportunity cost E.c.6 Profit E.c.7 Entrepreneurship E.c.8 Comparative advantage E.c.9 Specialization E.c.10 Productivity E.c.11 Interdependence
E.d	<b>Microeconomics and Macroeconomics</b> E.d.1 Supply, demand and price E.d.2 Individual choice E.d.3 Institutions E.d.4 Fiscal and monetary policy E.d.5 Regulation and costs of government policies E.d.6 Investment E.d.7 Government and market failures E.d.8 Inflation and deflation E.d.9 GDP E.d.10 Unemployment E.d.11 Tariffs
E.e	<b>Consumer economics</b> E.e.1 Types of credit E.e.2 Savings and banking E.e.3 Consumer credit laws
E.f	<b>Economic causes and impacts of wars</b>
E.g	<b>Economic drivers of exploration and colonization</b>
E.h	<b>Scientific and Industrial Revolutions</b>

<b>Geography</b>	
G.a	<b>Development of classical civilizations</b>
G.b	<b>Relationships between the environment and societal development</b> G.b.1 Nationhood and statehood G.b.2 Sustainability G.b.3 Technology G.b.4 Natural resources G.b.5 Human changes to the environment
G.c	<b>Borders between peoples and nations</b> G.c.1 Concepts of region and place G.c.2 Natural and cultural diversity G.c.3 Geographic tools and skills
G.d	<b>Human migration</b> G.d.1 Immigration, emigration and diaspora G.d.2 Culture, cultural diffusion and assimilation G.d.3 Population trends and issues G.d.4 Rural and urban settlement

# Reasoning Through Language Arts Test Passage Requirements and Exemplars

Passages selected for inclusion on the new GED® Reasoning Through Language Arts (RLA) Test must adhere to a number of guidelines with regard to both length and content.

- Stimulus passages for reading comprehension items will range from 400 to 900 words in length
- Drop-down item editing passages will range from 350 to 450 words
- Extended-response passages will range from 550 to 650 words

### **Fiction (25%):**

These passages should feature the conventions of good storytelling, such as characterization, thematic interest, and narrative thread. Literary elements (metaphor, imagery, etc.) and rich use of language are also helpful, though the items themselves will focus minimally on these elements. Excerpts should exhibit some sense of “completeness,” even if they are not composed of a discrete text. The pool of fiction passages, taken as a whole, should contain a variety of passages such that they provide natural opportunities to assess test-taker understanding of the full range of RLA Assessment Targets.

### **Informational (75%):**

These passages will be of high interest for a wide range of GED® test-takers. They will contain a variety of topics, focused around the three main categories of science, social studies, and workplace documents. These passages will reflect real-world situations and experiences.

- **Informational science**

Passages in this category will focus on a broad interpretation of two main themes:

1. Human health and living systems (e.g. nutrition, genetics, etc.)

- 2. Energy and related systems (e.g. conservation, modes of energy production, photosynthesis, etc.)

Some passages will be more academic in approach while others are directed toward a more popular audience, but all science passages will be interesting and engaging. Useful diagrams or graphics may occasionally accompany these passages in order provide a great opportunity for creative items and increase reader interest.

- **Informational social studies**

Social studies passages on the RLA Test will be excerpts or articles pertaining to the theme of “the Great American Conversation.” They may include excerpts from documents such as the Bill of Rights, the preamble to the U.S. Constitution (excluding the Declaration of Independence and the U.S. Constitution, as the reading levels of those documents exceed the high school-level target of the GED® test), and may also draw from any number of public speeches, U.S. Supreme Court decisions, and other writings that express important concepts about American civics. For instance, a letter about maintaining an archive of folk music lyrics and recordings from folk icon Woody Guthrie to a librarian at the National Archives is an example of an ideal passage. A letter from Teddy Roosevelt on the importance of preserving public land as national space would also be part of “the Great American Conversation.” These documents might consist of correspondence, articles, speeches, journal entries, or other important kinds of primary or secondary documents informing or informed by American civics.

- **Informational workplace**

These passages may include workplace letters, resume cover letters, letters to customer service departments, memos, flyers for company-sponsored events, explanations of initiatives, procedural documents, descriptions of activities, or changes in policies. They also include community-related documents like public postings or letters to the editor.



**About the assessment:**  
All of these

passage types will appear on the RLA Test. The Social Studies Test will feature only one passage, which will consist of primary and/or secondary source documents that will serve as the source text for the extended-response item. There are no passages on the Science Test or the Mathematics Test.

Again, these documents reflect real-world situations and are engaging to a broad range of readers.

**Passages for editing drop-down item sets**

These passages will not exceed 450 words. The subject matter for these passages will be drawn primarily from workplace and community documents, like the informational workplace passages described above. They will be similar to the types of texts that test-takers might encounter or produce in their daily lives. They will be written clearly and simply, but they will also provide variety in sentence structure and grammatical constructions so that range of elements of conventions defined in the Language Conventions and Usage targets can be measured.

**Source texts for extended-response prompts:**

These passages will not exceed 650 words. They may be drawn the same categories as the informational passages: social studies, science, and workplace. Some passages will feature paired texts, each relaying different aspects of a particular issue. These texts will include empirical support that is paraphrased from authentic sources. The prompts associated with these passages require test-takers to analyze arguments found within the source text(s) and use evidence directly from the text itself to support their responses. The GED® RLA Test extended-response (ER) prompts will be written with the intent to elicit responses that draw from the skills specified in the extended-response scoring rubric.

Other ER source texts and prompts will contain a small excerpt from a primary document and then one or two short pieces of opinion-based writing that include empirical support. The prompts for these passages will also focus on analysis of arguments and will require test-takers to cite evidence from the various source texts.

**Passage Text Complexity**

Passages on the new GED® assessment not only reflect a range of subject matter, but also a range of levels of complexity. The range of reading levels will be similar to range of those encountered in typical high school-level courses in English language arts, science, and social studies.



**Drop-down items** contain response

opportunities embedded directly within a text. The new GED® assessment will use this item type to assess language skills in tasks designed to mimic the editing process in an authentic manner. The items will present a brief text with three to six drop-down menus embedded within. The drop-down menus will contain several answer options which, when selected, will appear within the text itself.

The following series of excerpts are from Common Core State Standards appendix B. They are similar to the types of texts that appear on the new GED® RLA Test.

**Passage Exemplars**

**Churchill, Winston. "Blood, Toil, Tears and Sweat: Address to Parliament on May 13th, 1940." Lend Me Your Ears: Great Speeches in History, 3rd Edition. Edited by William Safire. New York: W. W. Norton, 2004. (1940)**

**From "Winston Churchill Braces Britons to Their Task"**

*I say to the House as I said to ministers who have joined this government, I have nothing to offer but blood, toil, tears, and sweat. We have before us an ordeal of the most grievous kind. We have before us many, many months of struggle and suffering.*

*You ask, what is our policy? I say it is to wage war by land, sea, and air. War with all our might and with all the strength God has given us, and to wage war against a monstrous tyranny never surpassed in the dark and lamentable catalogue of human crime. That is our policy.*

*You ask, what is our aim? I can answer in one word. It is victory. Victory at all costs - Victory in spite of all terrors - Victory, however long and hard the road may be, for without victory there is no survival.*

*I take up my task in buoyancy and hope. I feel sure that our cause will not be suffered to fail among men. I feel entitled at this juncture, at this time, to claim the aid of all and to say, "Come then, let us go forward together with our united strength."*

**United States. Preamble and First Amendment to the United States Constitution. (1787, 1791)**

**Preamble**

*We, the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and*





our Posterity, do ordain and establish this Constitution of the United States of America.

**Amendment I**

*Congress shall make no law respecting the establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of people peaceably to assemble, and to petition the Government for a redress of grievances.*

**Petroski, Henry. "The Evolution of the Grocery Bag." American Scholar 72.4 (Autumn 2003). (2003)**

*That much-reviled bottleneck known as the American supermarket checkout lane would be an even greater exercise in frustration were it not for several technological advances. The Universal Product Code and the decoding laser scanner, introduced in 1974, tally a shopper's groceries far more quickly and accurately than the old method of inputting each purchase manually into a cash register. But beeping a large order past the scanner would have led only to a faster pileup of cans and boxes down the line, where the bagger works, had it not been for the introduction, more than a century earlier, of an even greater technological masterpiece: the square-bottomed paper bag.*

*The geometry of paper bags continues to hold a magical appeal for those of us who are fascinated by how ordinary things are designed and made. Originally, grocery bags were created on demand by storekeepers, who cut, folded, and pasted sheets of paper, making versatile containers into which purchases could be loaded for carrying home. The first paper bags manufactured commercially are said to have been made in Bristol, England, in the 1840s. In 1852, a "Machine for Making Bags of Paper" was patented in America by Francis Wolle, of Bethlehem, Pennsylvania. According to Wolle's own description of the machine's operation, "pieces of paper of suitable length are given out from a roll of the required width, cut off from the roll and otherwise suitably cut to the required shape, folded, their edges pasted and lapped, and formed into complete and perfect bags." The "perfect bags" produced at the rate of eighteen hundred per hour by Wolle's machine were, of course, not perfect, nor was his machine. The history of design has yet to see the development of a perfect object, though it has seen many*

satisfactory ones and many substantially improved ones. The concept of comparative improvement is embedded in the paradigm for invention, the better mousetrap. No one is ever likely to lay claim to a “best” mousetrap, for that would preclude the inventor himself from coming up with a still better mousetrap without suffering the embarrassment of having previously declared the search complete. As with the mousetrap, so with the bag.

**“Space Probe.” *Astronomy & Space: From the Big Bang to the Big Crunch*. Edited by Phillis Engelbert. Farmington Hills, Mich.: Gale Cengage Learning, 2009. (2009)**

A space probe is an unpowered spacecraft that leaves Earth’s orbit to explore the Moon, planets, asteroids, comets, or other objects in outer space as directed by onboard computers and/or instructions send from Earth. The purpose of such missions is to make scientific observations, such as taking pictures, measuring atmospheric conditions, and collecting soil samples, and to bring or report the data back to Earth.

Numerous space probes have been launched since the former Soviet Union first fired Luna 1 toward the Moon in 1959. Probes have now visited each of the eight planets in the solar system.

In fact, two probes—Voyager 1 and Voyager 2—are approaching the edge of the solar system, for their eventual trip into the interstellar medium. By January 2008 Voyager 1 was about 9.4 billion miles (15.2 billion kilometers) from the Sun and in May 2008 it entered the heliosheath (the boundary where the solar wind is thought to end), which is the area that roughly divides the solar system from interstellar space. Voyager 2 is not quite as far as its sister probe. Voyager 1 is expected to be the first human space probe to leave the solar system. Both Voyager probes are still transmitting signals back to Earth. They are expected to help gather further information as to the true boundary of the solar system.

The earliest probes traveled to the closest extraterrestrial target, the Moon. The former Soviet Union launched a series of Luna probes that provided humans with first pictures of the far side of the Moon. In 1966, Luna 9 made the first



successful landing on the Moon and sent back television footage from the Moon’s surface.

The National Aeronautics and Space Administration (NASA) initially made several unsuccessful attempts to send a probe to the Moon. Not until 1964 did a Ranger probe reach its mark and send back thousands of pictures. Then, a few months after Luna 9, NASA landed Surveyor on the Moon.

In the meantime, NASA was moving ahead with the first series of planetary probes, called Mariner. Mariner 2 first reached the planet Venus in 1962. Later Mariner spacecrafts flew by Mars in 1964 and 1969, providing detailed images of that planet. In 1971, Mariner 9 became the first spacecraft to orbit Mars. During its year in orbit, Mariner 9’s two television cameras transmitted footage of an intense Martian dust storm, as well as images of 90 percent of the planet’s surface and the two Martian natural satellites (moons).

Encounters were also made with Mars in 1976 by the U.S. probes Viking 1 and Viking 2. Each Viking spacecraft consisted of both an orbiter and a lander. Viking 1 made the first successful soft landing on Mars on July 20, 1976. Soon after, Viking 2 landed on the opposite side of the planet. The Viking orbiters made reports on the Martian weather and photographed almost the entire surface of the planet.

**Henry, O. “The Gift of the Magi.” *The Best Short Stories of O. Henry.* New York: Modern Library, 1994. (1906)**

*White fingers and nimble tore at the string and paper. And then an ecstatic scream of joy; and then, alas! a quick feminine change to hysterical tears and wails, necessitating the immediate employment of all the comforting powers of the lord of the flat.*

*For there lay The Combs—the set of combs, side and back, that Della had worshipped long in a Broadway window. Beautiful combs, pure tortoise shell, with jewelled rims—just the shade to wear in the beautiful vanished hair. They were expensive combs, she knew, and her heart had simply craved and yearned over them without the least hope of possession. And now, they were hers, but the tresses that should have adorned the coveted adornments were gone.*

*But she hugged them to her bosom, and at length she was able to look up with dim eyes and a smile and say: "My hair grows so fast, Jim!"*

*And then Della leaped up like a little singed cat and cried, "Oh, oh!"*

*Jim had not yet seen his beautiful present. She held it out to him eagerly upon her open palm. The dull precious metal seemed to flash with a reflection of her bright and ardent spirit.*

*"Isn't it a dandy, Jim? I hunted all over town to find it. You'll have to look at the time a hundred times a day now. Give me your watch. I want to see how it looks on it."*

*Instead of obeying, Jim tumbled down on the couch and put his hands under the back of his head and smiled.*

*"Dell," said he, "let's put our Christmas presents away and keep 'em a while. They're too nice to use just at present. I sold the watch to get the money to buy your combs. And now suppose you put the chops on."*

*The magi, as you know, were wise men—wonderfully wise men—who brought gifts to the Babe in the manger. They invented the art of giving Christmas presents. Being wise, their gifts were no doubt wise ones, possibly bearing the privilege of exchange in case of duplication. And here I have lamely related to you the uneventful chronicle of two foolish children in a flat who most unwisely sacrificed for each other the greatest treasures of their house. But in a last word to the wise of these days let it be said that of all who give gifts these two were the wisest. Of all who give and receive gifts, such as they are wisest. Everywhere they are wisest. They are the magi.*

**Twain, Mark. *The Adventures of Tom Sawyer*. New York: Modern Library, 2001. (1876)**

**From Chapter 2: "The Glorious Whitewasher"**

*But Tom's energy did not last. He began to think of the fun he had planned for this day, and his sorrows multiplied. Soon the free boys would come tripping along on all sorts of delicious expeditions, and they would make a world of fun of him for having to work—the very thought of it burnt him like fire. He got out his worldly wealth and examined it—bits of toys,*

marbles, and trash; enough to buy an exchange of WORK, maybe, but not half enough to buy so much as half an hour of pure freedom. So he returned his straitened means to his pocket, and gave up the idea of trying to buy the boys. At this dark and hopeless moment an inspiration burst upon him! Nothing less than a great, magnificent inspiration.

He took up his brush and went tranquilly to work. Ben Rogers hove in sight presently—the very boy, of all boys, whose ridicule he had been dreading. Ben’s gait was the hop-skip-and-jump—proof enough that his heart was light and his anticipations high. He was eating an apple, and giving a long, melodious whoop, at intervals, followed by a deeptoned ding-dong-dong, ding-dong-dong, for he was personating a steamboat. As he drew near, he slackened speed, took the middle of the street, leaned far over to starboard and rounded to ponderously and with laborious pomp and circumstance—for he was personating the Big Missouri, and considered himself to be drawing nine feet of water. He was boat and captain and engine-bells combined, so he had to imagine himself standing on his own hurricane-deck giving the orders and executing them:

“Stop her, sir! Ting-a-ling-ling!” The headway ran almost out, and he drew up slowly toward the sidewalk.

“Ship up to back! Ting-a-ling-ling!” His arms straightened and stiffened down his sides.

“Set her back on the stabboard! Ting-a-ling-ling! Chow! ch-chow-wow! Chow!” His right hand, meantime, describing stately circles—for it was representing a forty-foot wheel.

“Let her go back on the labboard! Ting-a-lingling! Chow-ch-chow-chow!” The left hand began to describe circles.

“Stop the stabboard! Ting-a-ling-ling! Stop the labboard! Come ahead on the stabboard! Stop her! Let your outside turn over slow! Ting-a-ling-ling! Chow-ow-ow! Get out that head-line! LIVELY now! Come—out with your spring-line—what’re you about there! Take a turn round that stump with the bight of it! Stand by that stage, now—let her go! Done with the engines, sir! Ting-a-ling-ling! SH’T! S’H’T! SH’T!” (trying the gauge-cocks).”

Tom went on whitewashing—paid no attention to the steamboat. Ben stared a moment and then said: “Hi-YI! YOU’RE up a stump, ain’t you!”

No answer. Tom surveyed his last touch with the eye of an artist, then he gave his brush another gentle sweep and surveyed the result, as before. Ben ranged up alongside of him. Tom’s mouth watered for the apple, but he stuck to his work. Ben said:

“Hello, old chap, you got to work, hey?”

Tom wheeled suddenly and said:

“Why, it’s you, Ben! I warn’t noticing.”

“Say—I’m going in a-swimming, I am. Don’t you wish you could? But of course you’d druther WORK—wouldn’t you? Course you would!”

Tom contemplated the boy a bit, and said:

“What do you call work?”

“Why, ain’t THAT work?”

Tom resumed his whitewashing, and answered carelessly:

“Well, maybe it is, and maybe it ain’t. All I know, is, it suits Tom Sawyer.”

“Oh come, now, you don’t mean to let on that you LIKE it?”

The brush continued to move.

“Like it? Well, I don’t see why I oughtn’t to like it. Does a boy get a chance to whitewash a fence every day?”

That put the thing in a new light. Ben stopped nibbling his apple. Tom swept his brush daintily back and forth—

stepped back to note the effect—added a touch here and there—criticised the effect again—Ben watching every move and getting more and more interested, more and more absorbed. Presently he said:

“Say, Tom, let ME whitewash a little.”

Tom considered, was about to consent; but he altered his mind:

“No—no—I reckon it wouldn’t hardly do, Ben. You see, Aunt Polly’s awful particular about this fence—right here on the street, you know—but if it was the back fence I wouldn’t mind and SHE wouldn’t. Yes, she’s awful particular about this fence; it’s got to be done very careful; I reckon there ain’t one boy in a thousand, maybe two thousand, that can do it the way it’s got to be done.”



*“No—is that so? Oh come, now—lemme just try. Only just a little—I’d let YOU, if you was me, Tom.”*



# Appendix A

Appendix A gives the reference for each code identified in the “References” column in the Mathematical Reasoning Assessment Targets.



Numerical/Letter Symbol	Mathematics Standards Document Reference
<b>These domains come from the K-8 section of the Common Core State Standards for Mathematics. The numbers in parentheses represent the grade levels of that domain that served as the basis for creating GED® mathematical reasoning indicators.</b>	
EE (6, 7, 8)	Common Core State Standards for Mathematics Expressions and Equations
F (8)	Common Core State Standards for Mathematics Functions
G (7, 8)	Common Core State Standards for Mathematics Geometry
MD (3)	Common Core State Standards for Mathematics Measurement and Data
NF (4)	Common Core State Standards for Mathematics Numbers and Operations—Fractions
NS (6, 7)	Common Core State Standards for Mathematics The Number System
RP (6, 7)	Common Core State Standards for Mathematics Ratios and Proportional Relationships
SP (6, 7, 8)	Common Core State Standards for Mathematics Statistics and Probability
<b>These domains come from the High School section of the Common Core State Standards for Mathematics. The letter before the hyphen represents the conceptual category, while the letter(s) after the hyphen represent(s) the domain.</b>	
N-RN	Common Core State Standards for Mathematics Number and Quantity The Real Number System
N-Q	Common Core State Standards for Mathematics Number and Quantity Quantities
A-SSE	Common Core State Standards for Mathematics Algebra Seeing Structure in Expressions



<b>Numerical/Letter Symbol</b>	<b>Mathematics Standards Document Reference</b>
A-APR	Common Core State Standards for Mathematics Algebra Arithmetic with Polynomials and Rational Numbers
A-CED	Common Core State Standards for Mathematics Algebra Creating Equations
A-REI	Common Core State Standards for Mathematics Algebra Reasoning with Equations and Inequalities
F-IF	Common Core State Standards for Mathematics Functions Interpreting Functions
G-GPE	Common Core State Standards for Mathematics Geometry Expressing Geometric Properties with Equations
G-MG	Common Core State Standards for Mathematics Geometry Modeling with Geometry
S-ID	Common Core State Standards for Mathematics Statistics and Probability Interpreting Categorical and Quantitative Data
S-CP	Common Core State Standards for Mathematics Statistics and Probability Conditional Probability and the Rules of Probability
S-MD	Common Core State Standards for Mathematics Statistics and Probability Using Probability to Make Decisions
<b>The GED® mathematical practices are based on two publications: the Standards for Mathematical Practice found in the Common Core State Standards for Mathematics, and the Principles and Standards for School Mathematics published by the National Council of Teachers of Mathematics</b>	
M1, M2, M3, M4, M5, M6	Common Core State Standards for Mathematics Standards for Mathematical Practice
N1, N2, N3, N5, N6, N7, N8, N9	Principles and Standards for School Mathematics

# Appendix B

Appendix B gives the reference for each code identified in the “References” column in the Science Practices section of the Science Assessment Targets.



Numerical/Letter Symbol	Science Standards Document Reference
<b>The Reading, Writing, and Language Master Standards are found in the Common Core State Standards for English Language Arts 6-12.</b>	
R1, R2, R3, R4, R5, R7, R8, R9	Common Core State Standards for English Language Arts & Literacy Reading Master Standards
L3, L4	Common Core State Standards for English Language Arts & Literacy Language Master Standards
W2, W5, W7	Common Core State Standards for English Language Arts & Literacy Writing Master Standards
<b>The Standards for Mathematical Practice are found in the Common Core State Standards for Mathematics.</b>	
M2, M3, M4, M6, M7	Common Core State Standards for Mathematics Standards for Mathematical Practice
<b>The Science Practices are found in Dimension 1 of the Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas.</b>	
P1, P2, P3, P4, P5, P6, P7, P8	A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas Science Practices
<b>This domain comes from the K-8 section of the Common Core State Standards for Mathematics. The numbers in parentheses represent the grade levels of that domain that served as the basis for creating GED® mathematical reasoning indicators.</b>	
SP (7, 8)	Common Core State Standards for Mathematics Statistics and Probability
<b>These domains come from the High School section of the Common Core State Standards for Mathematics. The letter before the hyphen represents the conceptual category, while the letter(s) after the hyphen represent(s) the domain.</b>	
S-ID	Common Core State Standards for Mathematics Statistics and Probability Interpreting Categorical and Quantitative Data
S-CP	Common Core State Standards for Mathematics Statistics and Probability Conditional Probability and the Rules of Probability
S-MD	Common Core State Standards for Mathematics Statistics and Probability Using Probability to Make Decisions

# Appendix C

Appendix C gives the reference for each code identified in the “References” column in the Social Studies Practices section of the Social Studies Assessment Targets.



Numerical/Letter Symbol	Social Studies Standards Document Reference
R1, R2, R3, R4, R6, R7, R8, R9	CCSS for English Language Arts & Literacy Reading Master Standards
L1, L2, L4	CCSS for English Language Arts & Literacy Language Master Standards
W1, W2, W4	CCSS for English Language Arts & Literacy Writing Master Standards
NCSS Literacy Skills	National Curriculum Standards for Social Studies: A Framework for Teaching, Learning, and Assessment
NSH 2, NSH 3.E, NSH 3.F	National Standards for History Revised Edition
N-Q	Common Core State Standards for Mathematics Number and Quantity Quantities
RP	Common Core State Standards for Mathematics Ratios and Proportional Relationships
S-ID	CCSS for Mathematics Standards for Mathematical Content Statistics and Probability Using Probability to Make Decisions
S-MD	CCSS for Mathematics Standards for Mathematical Content Statistics and Probability Using Probability to Make Decisions
S-SP	CCSS for Mathematics Standards for Mathematical Content Statistics and Probability

# Appendix D

Appendix D gives a breakdown of the similarities between the 2002 Series GED® Test and the 2014 GED® test as well as a summary of the changes. Each content area’s section contains a table showing the content specifications that are comparable across both tests, followed by a “What’s new?” section that identifies specific innovations or improvements that we are implementing in the 2014 test’s content.

## The GED® Test: A Content Comparison Between 2002 and 2014

### Reasoning Through Language Arts (RLA) – Reading: Similarities between the 2002 and 2014 Tests

Note: Codes in **bold** in the 2014 column refer to the 2014 GED® Assessment Targets and Indicators as outlined in the body of Chapter 2 of the *Assessment Guide for Educators*. The codes may not appear in numerical order, as the goal of the table below is to show areas of correspondence between the 2002 content and the 2014 content.

RLA – Reading: Content Specifications	
2002	2014
Restate or paraphrase information.	<b>R.2.1</b> Comprehend explicit details and main ideas in a text.
Summarize main ideas.	<b>R.2.2</b> Summarize details and ideas in text.
Explain the primary implications of the text.	<b>R.2.4</b> Infer implied main ideas in paragraphs or whole texts.
Transfer concepts and principles from reading to a new context.	<b>R.2.7</b> Make evidence-based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.
Draw conclusions and understand consequences.	<b>R.2.8</b> Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.
Make inferences and recognize unstated assumptions	<b>R.2.3</b> Make sentence-level inferences about details that support main ideas.
Identify elements of style and structure and interpret the organizational structure or pattern in a text.	<b>R.5.4</b> Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.
Identify tone, word usage, characterization, use of detail and example, and figurative language.	<b>R.4.3/L.4.3</b> Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument. <b>R.3.1</b> Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts.

<b>RLA – Reading: Content Specifications</b>	
<b>2002</b>	<b>2014</b>
Identify cause and effect relationships.	<b>R.3.4</b> Infer relationships between ideas in a text (e.g. an implicit cause and effect, parallel, or contrasting relationship).
Distinguish conclusions from supporting statements.	<b>R.2.5</b> Determine which detail(s) supports a main idea.
Interpret tone, point of view, style or purpose of a work.	<b>R.6.1</b> Determine an author’s point of view or purpose of a text.
Make connections among parts of a text and integrate information from outside a passage with elements within the passage.	[Not assessed on 2014 test. Refer to R.5, R.7, and R.9 on the following page for how the 2014 test assesses related content]

**What’s new on the 2014 RLA test in the *Reading* content domain?**

In addition to continuing to measure test-takers’ knowledge and abilities with regard to key comprehension skills, the new 2014 Reasoning Through Language Arts test will be assessing a selection of reasoning skills that allow them to evaluate complex argumentative text and analyze information. While these skills infuse all of the new RLA Reading targets and indicators, they are described in some detail in the following Reading Targets and their corresponding Indicators, which represent an expansion upon the skills measured on the 2002 Series GED® Test.

- **R.3** Analyze how individuals, events, and ideas develop and interact over the course of a text.
- **R.5** Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.
- **R.6** Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.
- **R.8** Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- **R.7 and R.9** Analyze how two or more texts address similar themes or topics

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For more information on each of the Reading Targets, see Reasoning Through Language Arts Assessment Targets in the body of Chapter 2 of the *Assessment Guide for Educators*.

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# RLA – Language: Similarities between the 2002 and 2014 Tests



Note: Codes in **bold** in the 2014 column refer to the 2014 GED® Assessment Targets and Indicators as outlined in the body of Chapter 2 of the *Assessment Guide for Educators*. The codes may not appear in numerical order, as the goal of the table below is to show areas of correspondence between the 2002 content and the 2014 content.

<b>RLA – Language: Content Specifications</b>	
<b>2002</b>	<b>2014</b>
<p>Create effective text divisions (within or among paragraphs).</p> <p>Combine paragraphs to form a more effective document.</p> <p>Form new paragraphs within multi-paragraph documents.</p> <p>Create topic sentences.</p>	<p><b>L.1.9</b> Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity.</p> <p>[Note: Paragraph development and organizational skills are measured through Trait 2 of the Extended Response Scoring Rubric and will not appear in editing tasks on the 2014 RLA test.]</p>
<p>Edit to eliminate sentence fragments, run-on sentences, and comma splices.</p>	<p><b>L.2.2</b> Edit to eliminate run-on sentences, fused sentences, or sentence fragments.</p>
<p>Edit to eliminate improper coordination and subordination, modification, and parallelism.</p>	<p><b>L.1.5</b> Edit to eliminate dangling or misplaced modifiers or illogical word order (e.g., correctly use to meet almost all requirements instead of to almost meet all requirements).</p> <p><b>L.1.6</b> Edit to ensure parallelism and proper subordination and coordination.</p>
<p>Edit to eliminate subject-verb agreement (including agreement in number, interrupting phrases, and inverted structure).</p>	<p><b>L.1.2</b> Edit to correct errors in straightforward subject-verb agreement.</p> <p><b>L.1.7</b> Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns).</p>
<p>Edit to eliminate verb tense errors (including sequence of tenses, word clues to tense in sentences, word clues to tense in paragraphs, and verb form).</p>	<p>[Note: This skill is assessed on the 2014 test via Extended Response Scoring Rubric Trait 3 only.]</p>
<p>Edit to eliminate pronoun reference errors (including incorrect relative pronouns, pronoun shift, vague or ambiguous references, and agreement with antecedents).</p>	<p><b>L.1.3</b> Edit to correct errors in pronoun usage, including pronoun-antecedent agreement, unclear pronoun references, and pronoun case.</p> <p><b>L.1.7</b> Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns).</p>

RLA – Language: Content Specifications (continued)	
2002	2014
Edit to eliminate errors in capitalization (including proper names and adjectives, titles, and months/seasons).	<b>L.2.1</b> Edit to ensure correct use of capitalization (e.g., proper nouns, titles, and beginnings of sentences).
Edit to eliminate errors in punctuation (including commas in a series, commas between independent clauses joined by a conjunction, introductory elements, appositives, and the overuse of commas).	<b>L.2.4</b> Edit to ensure correct use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation).
Edit to eliminate errors in spelling (restricted to errors related to possessives, contractions, and homophones).	<p><b>L.1.1</b> Edit to correct errors involving frequently confused words and homonyms, including contractions (passed, past; two, too, to; there, their, they're; knew, new; it's its).</p> <p><b>L.2.3</b> Edit to ensure correct use of apostrophes with possessive nouns.</p>
[Not assessed on the 2002 Series test.]	<b>L.1.4</b> Edit to eliminate non-standard or informal usage (e.g., correctly use <i>try to win the game</i> instead of <i>try and win the game</i> )

**What’s new on the 2014 RLA test in the *Language* content domain?**

While virtually all of the language conventions and usage skills that are measured on the 2002 Series Writing Test will continue to be measured in the 2014 RLA editing tasks, one of the biggest innovations that appear in this content area is in how these tasks are presented. On the 2002 Series, editing items appear in multiple-choice format in which sentences or phrases that contain errors are excerpted from a passage. On the new test, however, test-takers will find passages with embedded drop-down menus within them. These drop-down style items simulate real-life editing tasks because, once the test-taker has chosen the appropriate phrase selection from the menu, the phrase selection appears right in the passage so that the test-taker can see the selection in the context of the sentence and overall passage.

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For more information on each of the Language Targets, see Reasoning Through Language Arts Assessment Targets in the body of Chapter 2 of the *Assessment Guide for Educators*.

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**RLA – Extended Response (Essay): Similarities between the 2002 and 2014 Tests**

Trait 2 of the 2014 Extended Response (ER) Scoring Rubric has extensive overlap with the 2002 Series Holistic Scoring Rubric.



<b>Dimensions of the 2002 Essay Rubric</b>	<b>Dimensions of the 2014 RLA ER Trait 2 Rubric</b>
Presents a clearly focused main idea that addresses the prompt.	Contains ideas that are thoroughly and logically developed, with full elaboration of main ideas
Establishes a clear and logical organization.	Establishes an effective organizational structure that is well-suited to the message and purpose of the response as a whole; applies transitional devices strategically and effectively
Achieves coherent development with specific and relevant details and examples.	Contains purposeful, logical progression of ideas with details closely tied to their main points
Consistently controls sentence structure and the conventions of EAE.	[Note: This 2002 content is measured on Trait 3 of the Extended Response Scoring Rubric.]
Exhibits varied and precise word choice	Chooses words purposefully and carefully to express ideas with clarity and logic; consistently and strategically applies advanced vocabulary.
[Note: The 2014 column lists a new dimension that was not assessed on the 2002 Series test.]	Strategically applies awareness of audience and purpose of the task to enhance meaning throughout the response.

### What’s new on the 2014 RLA test Extended Response (Essay)?

The extended response (ER) task on the 2014 test is designed to present a real-world opportunity for test-takers to demonstrate their ability to develop an argument and support their ideas with text-based evidence. Unlike the 2002 Series Essay prompts, which were presented outside of any context and which posed somewhat abstract questions to test-takers, the new ERs provide a brief pair of engaging passages describing opposing perspectives on a similar topic. Test-takers must read these passages and evaluate which position is better supported. As noted in the table above, the 2014 Trait 2 Rubric also adds an assessment of the test-takers awareness of both the audience and the purpose of the writing task.

In addition to the stylistic and organizational skills that are outlined in Trait 2 of the Scoring Rubric, test-takers’ responses to the new ER tasks will be evaluated on how well they use two other important sets of skills.

1. Creating Arguments and Using Evidence (Trait 1)
2. Clarity and Command of Standard English Conventions (Trait 3)

Trait 1 is designed to help scorers focus on not just the presentation of the test-takers’ ideas, but also the content of what they say in their essays. In particular, we are interested in how well test-takers can develop an argument in which they use evidence directly from the passages they are given in order to support their assertions.

Trait 3, on the other hand, which was incorporated into the 2002 Series Holistic rubric, specifically delineates a clear and limited number of key conventions and usage skills (outlined in the Language specifications above). The reason for separating these skills into a distinct trait on this rubric is that it is essential for test-takers to demonstrate their command of these skills in writing of their own, in addition to being able to apply them to the writing of another, as the editing tasks described above require.

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For more information about Traits 1, 2, and 3, see the RLA Extended Response Scoring Rubric in the body of Chapter 2 of the *Assessment Guide for Educators*.

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## Mathematical Reasoning: Similarities between 2002 and 2014 Tests:

Note: Codes in **bold** in the 2014 column refer to the 2014 GED® Assessment Targets and Indicators as outlined in the body of Chapter 2 of the *Assessment Guide for Educators*. The codes may not appear in numerical order, as the goal of the table below is to show areas of correspondence between the 2002 content and the 2014 content.



<b>Mathematical Reasoning: Content Specifications</b>	
<b>2002</b>	<b>2014</b>
Represent and use numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential, and scientific) in real-world and mathematical problem situations.	<p><b>Q.1.a</b> Order fractions and decimals, including on a number line.</p> <p><b>Q.1.c</b> Apply rules of exponents in numerical expressions with rational exponents to write equivalent expressions with rational exponents.</p> <p><b>Q.3.d</b> Solve two-step, arithmetic, real world problems involving percents. Examples include but are not limited to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase and decrease.</p>
Represent, analyze, and apply whole numbers, decimals, fractions, percents, ratios, proportions, exponents, roots, and scientific notation in a wide variety of situations.	<p><b>Q.1.a</b> Order fractions and decimals, including on a number line.</p> <p><b>Q.1.b</b> Apply number properties involving multiples and factors, such as using the least common multiple, greatest common factor, or distributive property to rewrite numeric expressions.</p> <p><b>Q.2.a</b> Perform addition, subtraction, multiplication, and division on rational numbers.</p> <p><b>Q.2.b</b> Perform computations and write numerical expressions with squares and square roots of positive, rational numbers.</p> <p><b>Q.2.c</b> Perform computations and write numerical expressions with cubes and cube roots of positive, rational numbers.</p> <p><b>Q.2.e</b> Solve one-step or multi-step arithmetic, real world problems involving the four operations with rational numbers, including those involving scientific notation.</p> <p><b>Q.3.c</b> Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure.</p> <p><b>Q.3.d</b> Solve two-step, arithmetic, real world problems involving percents. Examples include but are not limited to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase and decrease.</p>
Recognize equivalencies and order relations for whole numbers, fractions, decimals, integers, and rational numbers.	<b>Q.1.a</b> Order fractions and decimals, including on a number line.
Select the appropriate operations to solve problems (for example, When should I divide?).	[Not assessed on the 2014 test]
Relate basic arithmetic operations to one another.	[Not assessed on the 2014 test]
Calculate mentally, with pencil and paper, and with a scientific calculator using whole numbers, fractions, decimals, and integers.	<b>Q.2.a</b> Perform addition, subtraction, multiplication, and division on rational numbers.

<b>Mathematical Reasoning: Content Specifications (continued)</b>	
<b>2002</b>	<b>2014</b>
Use estimation to solve problems and assess the reasonableness of an answer.	[Not assessed on the 2014 test]
Model and solve problems using the concepts of perpendicularity, parallelism, congruence, and similarity of geometric figures.	[Not assessed on the 2014 test]
Use spatial visualization skills to describe and analyze geometric figures and translations/rotations/dilations of geometric figures.	[Not assessed on the 2014 test]
Use the Pythagorean theorem to model and solve problems.	<b>Q.4.e</b> Use the Pythagorean theorem to determine unknown side lengths in a right triangle.
Find, use, and interpret the slope of a line, the y-intercept of a line, and the intersection of two lines.	<p><b>A.5.b</b> Determine the slope of a line from a graph, equation, or table.</p> <p><b>A.5.c</b> Interpret unit rate as the slope in a proportional relationship.</p> <p><b>A.5.d</b> Graph two-variable linear equations.</p> <p><b>A.5.e</b> For a function that models a linear or nonlinear relationship between two quantities, interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior, and periodicity.</p>
Find, use, and interpret the slope of a line, the y-intercept of a line, and the intersection of two lines (continued from previous page).	<p><b>A.6.a</b> Write the equation of a line with a given slope through a given point.</p> <p><b>A.6.c</b> Use slope to identify parallel and perpendicular lines and to solve geometric problems.</p>
Use coordinates to design and describe geometric figures.	<b>A.5.a</b> Locate points in the coordinate plane.
Identify and select appropriate units of metric and customary measures.	[Not assessed on the 2014 test]
Convert and estimate units of metric and customary measure (all conversions within systems).	<p><b>Q.3.c</b> Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure.</p> <p><b>Q.4.a</b> Compute the area and perimeter of triangles and rectangles. Determine side lengths of triangles and rectangles when given area or perimeter.</p> <p><b>Q.4.b</b> Compute the area and circumference of circles. Determine the radius or diameter when given area or circumference.</p> <p><b>Q.4.c</b> Compute the perimeter of a polygon. Given a geometric formula, compute the area of a polygon. Determine side lengths of the figure when given the perimeter or area.</p> <p><b>Q.4.d</b> Compute perimeter and area of 2-D composite geometric figures, which could include circles, given geometric formulas as needed.</p> <p><b>Q.5.a</b> When given geometric formulas, compute volume and surface area of rectangular prisms. Solve for side lengths or height, when given volume or surface area.</p> <p><b>Q.5.b</b> When given geometric formulas, compute volume and surface area of cylinders. Solve for height, radius, or diameter when given volume or surface area.</p> <p><b>Q.5.c</b> When given geometric formulas, compute volume and surface area of right prisms. Solve for side lengths or height, when given volume or surface area.</p> <p><b>Q.5.d</b> When given geometric formulas, compute volume and surface area of right pyramids and cones. Solve for side lengths, height, radius, or diameter when given volume or surface area.</p>

<b>Mathematical Reasoning: Content Specifications (continued)</b>	
<b>2002</b>	<b>2014</b>
Convert and estimate units of metric and customary measure (all conversions within systems). (Continued)	<b>Q.5.e</b> When given geometric formulas, compute volume and surface area of spheres. Solve for radius or diameter when given the surface area.
Solve and estimate solutions to problems involving length, perimeter, area, surface area, volume, angle measurement, capacity, weight, and mass.	<b>Q.5.f</b> Compute surface area and volume of composite 3-D geometric figures, given geometric formulas as needed.
Use uniform rates (e.g., miles per hour, bushels per acre) in problem situations.	<p><b>Q.2.e</b> Solve one-step or multi-step arithmetic, real world problems involving the four operations with rational numbers, including those involving scientific notation.</p> <p><b>Q.3.a</b> Compute unit rates. Examples include but are not limited to: unit pricing, constant speed, persons per square mile, BTUs per cubic foot.</p> <p><b>Q.3.b</b> Use scale factors to determine the magnitude of a size change. Convert between actual drawings and scale drawings.</p> <p><b>Q.3.c</b> Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure.</p>
Read and interpret scales, meters, and gauges	[Not assessed on the 2014 test]
Predict the impact of changes in linear dimension on the perimeter, area, and volume of figures.	[Not assessed on the 2014 test]
<p>Construct, interpret, and draw inferences from tables, charts, and graphs.</p> <p>Make inferences and convincing arguments based on data analysis.</p> <p>Represent data graphically in ways that make sense and are appropriate to the context.</p> <p>Use an informal line of best fit to make predictions from data.</p>	<p><b>Q.6.a</b> Represent, display, and interpret categorical data in bar graphs or circle graphs.</p> <p><b>Q.6.b</b> Represent, display, and interpret data involving one variable plots on the real number line including dot plots, histograms, and box plots.</p> <p><b>Q.6.c</b> Represent, display, and interpret data involving two variables in tables and the coordinate plane including scatter plots and graphs.</p>
Evaluate arguments based on data analysis, including distinguishing between correlation and causation.	[Not assessed on the 2014 test]
Apply measures of central tendency (mean, median, mode) and analyze the effect of changes in data on these measures.	<b>Q.7.a</b> Calculate the mean, median, mode and range. Calculate a missing data value, given the average and all the missing data values but one, as well as calculating the average, given the frequency counts of all the data values, and calculating a weighted average.
Apply and recognize sampling and bias in statistical claims.	[Not assessed on the 2014 test]
Make predictions based on experimental or theoretical probabilities, including listing possible outcomes.	<p><b>Q.8.a</b> Use counting techniques to solve problems and determine combinations and permutations.</p> <p><b>Q.8.b</b> Determine the probability of simple and compound events.</p>
Compare and contrast different sets of data on the basis of measures of central tendency and dispersion (range, standard deviation).	[Not assessed on the 2014 test]

<b>Mathematical Reasoning: Content Specifications (continued)</b>	
<b>2002</b>	<b>2014</b>
Analyze and represent situations involving variable quantities with tables, graphs, verbal descriptions, and equations.	<p><b>A.2.b</b> Solve real-world problems involving linear equations.</p> <p><b>A.5.d</b> Graph two-variable linear equations.</p> <p><b>A.5.e</b> For a function that models a linear or nonlinear relationship between two quantities, interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior, and periodicity.</p> <p><b>A.7.a</b> Compare two different proportional relationships represented in different ways. Examples include but are not limited to: compare a distance-time graph to a distance-time equation to determine which of two moving objects has a greater speed.</p> <p><b>A.7.d</b> Compare properties of two linear or quadratic functions each represented in a different way (algebraically, numerically in tables, graphically or by verbal descriptions). Examples include but are not limited to: given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</p>
Recognize that a variety of problem situations may be modeled by the same function or type of function (e.g., $y = mx + b$ , $y = ax^2$ , $y = ax$ , $y = 1/x$ ).	<p><b>A.2.c</b> Write one-variable and multi-variable linear equations to represent context.</p> <p><b>A.4.b</b> Write one-variable quadratic equations to represent context.</p>
Convert between different representations, such as tables, graphs, verbal descriptions, and equations.	<p><b>A.2.c</b> Write one-variable and multi-variable linear equations to represent context.</p> <p><b>A.4.b</b> Write one-variable quadratic equations to represent context.</p> <p><b>A.5.d</b> Graph two-variable linear equations.</p>
Create and use algebraic expressions and equations to model situations and solve problems.	<p><b>A.1.a</b> Add, subtract, factor, multiply and expand linear expressions with rational coefficients.</p> <p><b>A.1.c</b> Write linear expressions as part of word-to-symbol translations or to represent common settings.</p> <p><b>A.1.d</b> Add, subtract, multiply polynomials, including multiplying two binomials, or divide factorable polynomials.</p> <p><b>A.1.g</b> Write polynomial expressions as part of word-to-symbol translations or to represent common settings.</p> <p><b>A.1.h</b> Add, subtract, multiply and divide rational expressions.</p> <p><b>A.1.j</b> Write rational expressions as part of word-to-symbol translations or to represent common settings.</p> <p><b>A.2.b</b> Solve real-world problems involving linear equations.</p> <p><b>A.2.c</b> Write one-variable and multi-variable linear equations to represent context.</p> <p><b>A.2.d</b> Solve a system of two simultaneous linear equations by graphing, substitution, or linear combination. Solve real-world problems leading to a system of linear equations.</p> <p><b>A.4.a</b> Solve quadratic equations in one variable with rational coefficients and real solutions, using appropriate methods. (e.g., quadratic formula, completing the square, factoring, inspection).</p> <p><b>A.4.b</b> Write one-variable quadratic equations to represent context.</p>

<b>Mathematical Reasoning: Content Specifications (continued)</b>	
<b>2002</b>	<b>2014</b>
Convert between different representations, such as tables, graphs, verbal descriptions, and equations.	<p><b>A.2.c</b> Write one-variable and multi-variable linear equations to represent context.</p> <p><b>A.4.b</b> Write one-variable quadratic equations to represent context.</p> <p><b>A.5.d</b> Graph two-variable linear equations.</p>
Evaluate formulas.	<p><b>A.1.b</b> Evaluate linear expressions by substituting integers for unknown quantities.</p> <p><b>A.1.e</b> Evaluate polynomial expressions by substituting integers for unknown quantities.</p> <p><b>A.1.i</b> Evaluate rational expressions by substituting integers for unknown quantities.</p> <p><b>A.7.c</b> Evaluate linear and quadratic functions for values in their domain when represented using function notation.</p>
Solve equations, including first degree, quadratic, power, and systems of linear equations.	<p><b>A.2.a</b> Solve one-variable linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms or equations with coefficients represented by letters.</p> <p><b>A.2.b</b> Solve real-world problems involving linear equations.</p> <p><b>A.2.d</b> Solve a system of two simultaneous linear equations by graphing, substitution, or linear combination. Solve real-world problems leading to a system of linear equations.</p> <p><b>A.4.a</b> Solve quadratic equations in one variable with rational coefficients and real solutions, using appropriate methods. (e.g., quadratic formula, completing the square, factoring, inspection).</p> <p><b>A.4.b</b> Write one-variable quadratic equations to represent context.</p>
Recognize and use direct and indirect variation.	[Not assessed on the 2014 test]
Analyze tables and graphs to identify and generalize patterns and relationships.	<p><b>A.2.b</b> Solve real-world problems involving linear equations.</p> <p><b>A.5.d</b> Graph two-variable linear equations.</p>
Analyze and use functional relationships to explain how a change in one quantity results in a change in another quantity, including linear, quadratic, and exponential functions.	[Not assessed on the 2014 test]

### What’s new on the 2014 Mathematical Reasoning Test?

As shown in the tables above, one of the major differences between the content of the 2002 Series Mathematics Test and the 2014 Mathematical Reasoning Test is the clarity with which each skill is articulated. Breaking each of these skills down into greater detail than the 2002 Series content framework provided is intended to give greater guidance and specificity to test developers, instructional materials developers, and educators.

Note that there are **some skills tested on the 2002 Series GED® Test that will not appear on the 2014 test**. The elimination of certain skills is generally **NOT** due to the fact that those skills are no longer important, but, rather, it is sometimes because those skills are foundational to other skills that **are** being assessed on the 2014 test. In other instances, because of the 2014 test’s focus on **deep mastery** of core foundational skills, some more advanced mathematics have been moved out of the scope of the test. In addition, in the particular case of many statistics-based skills, those skills appear on the 2014 test in the Science and Social Studies tests, as opposed to the Mathematical Reasoning test.

In addition to all the skills that align with what has been previously measured, the 2014 test includes items that test the following skills:

- **Q.1.d** Identify absolute value of a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, including using the absolute value of their difference.
- **Q.2.d** Determine when a numerical expression is undefined.
- **A.1.f** Factor polynomial expressions.
- **A.3.a** Solve linear inequalities in one variable with rational number coefficients.
- **A.3.b** Identify or graph the solution to a one variable linear inequality on a number line.
- **A.3.c** Solve real-world problems involving inequalities.
- **A.3.d** Write linear inequalities in one variable to represent context.



- **A.7.b** Represent or identify a function in a table or graph as having exactly one output (one element in the range) for each input (each element in the domain).

This more granular approach to describing the mathematical content is not the only improvement upon the 2002 Series test. In addition, the 2014 test includes items that measure the Mathematical Practices. These practices are skills that are drawn both from career- and college-readiness standards for Mathematical Practice and from the Principles and Standards for School Mathematics developed by the National Council of Teachers of Mathematics.

The content indicators and Mathematical Practices found in the GED® Mathematical Reasoning Assessment Targets, though related, cover different aspects of item content considerations. The content indicators focus on mathematical content and they describe very specific knowledge and skills. In contrast, the mathematical practices focus more on mathematical reasoning skills and modes of thinking mathematically. Most of the Mathematical Practices are not specific to any one particular area of mathematics content, meaning that a mathematical practice indicator could be applied to test items that cover a variety of content domains (e.g., algebra, data analysis, number sense).

The Mathematical Practices provide specifications for assessing real-world problem-solving skills in a mathematical context rather than requiring students only to memorize, recognize and apply a long list of mathematical algorithms. Each practice falls into one of the five following categories.

- MP.1 Building Solution Pathways and Lines of Reasoning
- MP.2 Abstracting Problems
- MP.3 Furthering Lines of Reasoning
- MP.4 Mathematical Fluency
- MP.5 Evaluating Reasoning and Solution Pathways

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For more information on the mathematical practices, see the Mathematical Reasoning Assessment Targets in the body of Chapter 2 of the *Assessment Guide for Educators*.

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## Science: Similarities between the 2002 and 2014 Tests

Note: Codes in **bold** in the 2014 column refer to the 2014 GED® Assessment Targets and Indicators as outlined in the body of Chapter 2 of the *Assessment Guide for Educators*. The codes may not appear in numerical order, as the goal of the table below is to show areas of correspondence between the 2002 content and the 2014 content.



<b>Science Practices</b>	
<b>2002</b>	<b>2014</b>
Understand unifying concepts and processes, including <ul style="list-style-type: none"> <li>• systems</li> <li>• order and organization</li> <li>• evidence</li> <li>• models and explanations</li> <li>• change, constancy and measurement</li> <li>• evolution</li> <li>• equilibrium</li> </ul>	<p><b>SP.1.a</b> Understand and explain textual scientific presentations.</p> <p><b>SP.1.b</b> Determine the meaning of symbols, terms and phrases as they are used in scientific presentations.</p> <p><b>SP.1.c</b> Understand and explain a non-textual scientific presentations.</p> <p><b>SP.7.a</b> Understand and apply scientific models, theories and processes.</p> <p><b>SP.7.b</b> Apply formulas from scientific theories.</p>
Use science as inquiry, including <ul style="list-style-type: none"> <li>• identifying questions and concepts that guide scientific investigations</li> <li>• designing and conducting scientific investigations</li> <li>• using appropriate tools and techniques to gather data</li> <li>• thinking critically and logically about relationships between evidence and explanations</li> <li>• analyzing alternative explanations</li> <li>• communicating scientific arguments</li> <li>• understanding scientific inquiry</li> </ul>	<p><b>SP.2.a</b> Identify possible sources of error and alter the design of an investigation to ameliorate that error.</p> <p><b>SP.2.b</b> Identify and refine hypotheses for scientific investigations.</p> <p><b>SP.2.c</b> Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs.</p> <p><b>SP.2.d</b> Design a scientific investigation.</p> <p><b>SP.2.e</b> Identify and interpret independent and dependent variables in scientific investigations.</p> <p><b>SP.3.a</b> Cite specific textual evidence to support a finding or conclusion.</p> <p><b>SP.3.b</b> Reason from data or evidence to a conclusion.</p> <p><b>SP.3.c</b> Make a prediction based upon data or evidence.</p> <p><b>SP.3.d</b> Using sampling techniques to answer scientific questions.</p> <p><b>SP.4.a</b> Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence.</p> <p><b>SP.5.a</b> Reconcile multiple findings, conclusions or theories.</p> <p><b>SP.6.a</b> Express scientific information or findings visually.</p> <p><b>SP.6.b</b> Express scientific information or findings numerically or symbolically.</p> <p><b>SP.6.c</b> Express scientific information or findings verbally.</p> <p><b>SP.8.a</b> Describe a data set statistically.</p> <p><b>SP.8.b</b> Use counting and permutations to solve scientific problems.</p> <p><b>SP.8.c</b> Determine the probability of events.</p>

<b>Science Practices (continued)</b>	
<b>2002</b>	<b>2014</b>
<p>Understand the links between science and technology to</p> <ul style="list-style-type: none"> <li>• Identify, change, or improve a piece of technology or technique</li> <li>• Make decisions in regards to identifying and stating new problems or needs</li> <li>• Designing, implementing, and evaluating a solution.</li> </ul> <p>Use science in social and personal perspectives to make decisions about personal and social issues, including</p> <ul style="list-style-type: none"> <li>• personal and community health</li> <li>• population growth</li> <li>• natural resources</li> <li>• environmental quality</li> <li>• natural and human-induced hazards</li> <li>• science and technology in local, national, and global challenges.</li> </ul>	<p>[Science and technology and science in social and personal perspectives are not separately assessed on the 2014 test. These overall concepts are integrated into the other relevant areas on the 2014 test.]</p>

### Science Content Topics

<b>Physical Science</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• structure of atoms</li> <li>• structure and properties of matter</li> <li>• chemical reactions</li> <li>• motions and forces</li> <li>• conservation of energy and increase in disorder</li> <li>• interactions of energy and matter</li> </ul>	<p><b>P.a</b> Conservation, Transformation, and Flow of Energy</p> <p><b>P.b</b> Work, Motion, and Forces</p> <p><b>P.c</b> Chemical Properties and Reactions Related to Living Systems</p>

<b>Life Science</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• the cell</li> <li>• molecular basis of heredity</li> <li>• biological evolution</li> <li>• interdependence of organisms</li> <li>• matter</li> <li>• energy</li> <li>• organization in living systems</li> </ul>	<p><b>L.a</b> Human Body and Health</p> <p><b>L.b</b> Relationship Between Life Functions and Energy Intake</p> <p><b>L.c</b> Energy Flows in Ecologic Networks (Ecosystems)</p> <p><b>L.d</b> Organization of Life (Structure and Function of Life)</p> <p><b>L.e</b> Molecular Basis for Heredity</p> <p><b>L.f</b> Evolution</p>

<b>Earth and Space Science</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• energy in the Earth system</li> <li>• geochemical cycles</li> <li>• origin and evolution of the Earth system</li> <li>• origin and evolution of the universe</li> </ul>	<p><b>ES.a</b> Interactions between Earth's Systems and Living Things</p> <p><b>ES.b</b> Earth and its System Components and Interactions</p> <p><b>ES.c</b> Structures and Organization of the Cosmos</p>

### What’s new on the 2014 Science Test?

Many of the science reasoning skills that were assessed on the 2002 test will continue to be assessed on the 2014 test. However, in the new Science Practices, these skills are articulated in greater detail and with greater focus. The new science practices focus on test-takers’ ability to glean information from scientific texts, reason with data representations and statistics, and apply key scientific models, theories and processes. The intent of the Science Practices is to provide clearer and more specific information to both test developers and educators about the skills that will be assessed.

Similarly, the content of the 2014 Science test will continue to be drawn from the three major content domains of Physical Science, Life Science and Earth and Space Science. However, instead of the broad and open-ended categories that appeared in the 2002 content specifications, the Content Topics in the 2014 Science Assessment Targets are broken down into the Subtopics, which give much greater detail so as to narrow the scope of the content that is “fair game” for being featured in test questions. The content topics are also further filtered by the focusing themes. Content of each item must pertain to one of these two themes:

- Human Health and Living Systems
- Energy and Related Systems

Test-takers should be *broadly and generally familiar* with each of the basic concepts enumerated in the Science Content Topics and Subtopics, and they should be able to recognize and understand, in context, each of the *terms* listed therein. Test-takers are **not** expected to have an in-depth and comprehensive knowledge of each subtopic. Rather, the stimuli about which each question pertains will provide necessary details about scientific figures, formulas, and other key principles. For example, a question may include answer options and stimuli that contain specific terms drawn from the content subtopics; however, test-takers will never



be asked to formulate their own definition a term without the item providing sufficient contextual support for such a task.

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For more information on the science content topics and subtopics and the focusing themes, see the Science Assessment Targets in the body of Chapter 2 of the *Assessment Guide for Educators*.

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### Social Studies: Similarities between the 2002 and 2014 Tests

Note: Codes in **bold** in the 2014 column refer to the 2014 GED® Assessment Targets and Indicators as outlined in the body of Chapter 2 of the *Assessment Guide for Educators*. The codes may not appear in numerical order, as the goal of the table below is to show areas of correspondence between the 2002 content and the 2014 content.



<b>Social Studies Practices</b>	
<b>2002</b>	<b>2014</b>
Understand the meaning and intent of text and/or visual material, restate information and summarize ideas.	<b>SSP.1.a</b> Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence. <b>SSP.4.a</b> Determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies.
Identify implications and make inferences.	<b>SSP.1.b</b> Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.
Use information and ideas in a situation different from that provided by the item stimulus.	<b>SSP.1.b</b> Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.
Apply the appropriate abstraction to a new problem without prompting or instruction.	[Not assessed on the 2014 test.]
Break down information and understand the relationship between component ideas.	<b>SSP.2.a</b> Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence. <b>SSP.2.b</b> Describe people, places, environments, processes, and events, and the connections between and among them.
Distinguish facts from opinions and hypotheses.	<b>SSP.7.a</b> Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document. <b>SSP.7.b</b> Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.
Distinguish conclusions from supporting statements.	<b>SSP.11.b</b> Identify specific pieces of evidence an author uses in support of claims or conclusions.
Recognize information that is designed to persuade an audience, recognize unstated assumptions, recognize fallacies in logic in arguments or conclusions.	<b>SSP.5.b</b> Identify instances of bias or propagandizing.
Identify cause and effect relationships and distinguish them from other sequential relationships.	<b>SSP.3.a</b> Identify the chronological structure of a historical narrative and sequence steps in a process.
Recognize the point of view of a writer in a historical account.	<b>SSP.5.a</b> Identify aspects of a historical document that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).
Recognize the historical context of the text, avoiding "present-mindedness."	<b>SSP.5.c</b> Analyze how a historical context shapes an author's point of view.
Identify comparisons and contrasts among points of view and interpretations of issues.	<b>SSP. 8.a</b> Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.

<b>Social Studies Practices (continued)</b>	
<b>2002</b>	<b>2014</b>
Determine implications, effects, and the value of presenting visual data in different ways.	<p><b>SSP.6.a</b> Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</p> <p><b>SSP.6.b</b> Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons.</p> <p><b>SSP.6.c</b> Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words.</p>
Use criteria provided to make judgments about the validity or accuracy of information.	<b>SSP.5.d</b> Evaluate the credibility of an author in historical and contemporary political discourse.
Identify generalizations, principles, or strategies and assess the appropriateness of information to substantiate conclusions, hypotheses, and generalizations (using such criteria as source, objectivity, technical correctness, and currency).	<p><b>SSP.2.a</b> Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence.</p> <p><b>SSP.5.d</b> Evaluate the credibility of an author in historical and contemporary political discourse.</p>
Assess the accuracy of facts.	<p><b>SSP.3.a</b> Identify the chronological structure of a historical narrative and sequence steps in a process.</p> <p><b>SSP.5.d</b> Evaluate the credibility of an author in historical and contemporary political discourse.</p>
Compare and contrast differing accounts of the same event.	<p><b>SSP.5.d</b> Evaluate the credibility of an author in historical and contemporary political discourse.</p> <p><b>SSP.8.a</b> Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.</p>
Recognize the role that values, beliefs, and convictions play in decision making.	<p><b>SSP.5.a</b> Identify aspects of a historical document that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).</p> <p><b>SSP.5.b</b> Identify instances of bias or propagandizing.</p>



**Social Studies Content Topics**

<b>United States History</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• Beginnings to 1820 (Native Peoples, Colonization, Settlement, Revolution, the New Nation)</li> <li>• 1801–1900 (Expansion, Reform, Civil War, Reconstruction, Industrial Development)</li> <li>• 1890–present (Emergence of Modern America, Great Depression, World War II, Postwar United States, Contemporary United States)</li> </ul>	<p><b>USH.a</b> Key historical documents that have shaped American constitutional government</p> <p><b>USH.b</b> Revolutionary and Early Republic Periods</p> <p><b>USH.c</b> Civil War and Reconstruction</p> <p><b>USH.d</b> Civil Rights</p> <p><b>USH.e</b> European settlement and population of the Americas</p> <p><b>USH.f</b> World Wars I &amp; II</p> <p><b>USH.g</b> The Cold War</p> <p><b>USH.h</b> American foreign policy since 9/11</p>

<b>Geography and the World</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• World in Spatial Terms</li> <li>• Places and Regions</li> <li>• Physical Systems</li> <li>• Human Systems</li> <li>• Environment and the Society</li> <li>• Uses of Geography</li> <li>• Beginnings–1000 B.C. (Beginnings and Early Civilizations)</li> <li>• 1000 B.C.–300 B.C. (Classical Traditions, Empires, Religions)</li> <li>• 300 B.C.–A.D. 1770 (Growing Trade, Hemispheric Interactions, First Global Age)</li> <li>• 1750–1914 (Age of Revolutions)</li> <li>• 1900–present (Urbanization; World Wars; Global Depression; Advances in Science and Technology)</li> <li>• New Democracies of Africa, Asia, South America; The Cold War; “Global Culture”)</li> </ul>	<p><b>G. a</b> Development of classical civilizations</p> <p><b>G. b</b> Relationships between the environment and societal development</p> <p><b>G. c</b> Borders between peoples and nations</p> <p><b>G. d</b> Human Migration</p>

<b>Civics and Government</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Politics and Government</li> <li>• Foundations of the American Political System</li> <li>• American Government</li> <li>• Relationship of United States to Other Nations</li> <li>• The Roles of Citizens in American Democracy</li> </ul>	<p><b>CG.a</b> Types of modern and historical governments</p> <p><b>CG.b</b> Principles that have contributed to development of American constitutional democracy</p> <p><b>CG.c</b> Structure and design of United States government</p> <p><b>CG.d</b> Individual rights and civic responsibilities</p> <p><b>CG.e</b> Political parties, campaigns, and elections in American politics</p> <p><b>CG.f</b> Contemporary Public Policy</p>

<b>Economics</b>	
<b>2002</b>	<b>2014</b>
<ul style="list-style-type: none"> <li>• Economic Reasoning and Choice</li> <li>• Comparison of Economic Systems</li> <li>• Business in a Free Enterprise System</li> <li>• Production and Consumers</li> <li>• Financial Institutions</li> <li>• Government’s Role in the Economy, Labor and the Economy</li> <li>• Global Markets and Foreign Trade</li> </ul>	<p><b>E. a</b> Key economic events that have shaped American government and policies</p> <p><b>E. b</b> Relationship between political and economic freedoms</p> <p><b>E. c</b> Fundamental Economic Concepts</p> <p><b>E. d</b> Microeconomics and Macroeconomics</p> <p><b>E. e</b> Consumer economics</p> <p><b>E. f</b> Economic causes and impacts of wars</p> <p><b>E.g</b> Economic drivers of exploration &amp; colonization</p> <p><b>E. h</b> Scientific and Industrial Revolutions</p>

### What’s new on the 2014 Social Studies Test?

Many of the social studies reasoning skills that were assessed on the 2002 test will continue to be assessed on the 2014 test. However, in the new Social Studies Practices, these skills are articulated in greater detail and with greater focus. The new Social Studies Practices focus on test-takers’ ability to glean information from primary and secondary source documents, reason with data representations and statistics, and apply key concepts and ideas relevant to the social sciences. The intent of the Social Studies Practices is to provide clearer and more specific information to both test developers and educators about the skills that will be assessed. In addition to the skills listed above, the 2014 test also assesses the following key skills and their related sub-skills (indicators) on the Social Studies test:

- SSP.8 Analyzing relationships between texts
- SSP.9 Writing analytic responses to source texts
- SSP.10 Reading and interpreting graphs, charts and other data representation

Note: SSP.9 will be assessed in the new Social Studies Extended Response task. For more information, see the Social Studies Extended Response Scoring Rubric in the *Assessment Guide for Educators*.

Similarly, the content of the 2014 Social Studies test will continue to be drawn from the four major content domains of United States History, Geography and the World, Civics and Government, and Economics. However, instead of the broad and open-ended categories that appeared in the 2002 content specifications, the Content Topics in the 2014 Social Studies Assessment Targets are broken down into the Subtopics, which give much greater detail so as to narrow the scope of the content that is “fair game” for being featured in test questions. The content topics are also further filtered by the focusing themes. Content of each item must pertain to one of these two themes:

- Development of Modern Liberties and Democracy
- Dynamic Responses in Societal Systems

Test-takers should be *broadly and generally familiar* with each of the basic concepts enumerated in the Social Studies

Content Topics and Subtopics, and they should be able to recognize and understand, in context, each of the *terms* listed therein. Test-takers are **not** expected, however, to have an in-depth and comprehensive knowledge of each subtopic. Rather, the stimuli about which each question pertains will provide necessary details about historical figures, timelines, and other key principles. For example, a question may include answer options and stimuli that contain specific terms drawn from the content subtopics; however, test-takers will never be asked to formulate their own definition a term without the item providing sufficient contextual support for such a task.

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For more information on the social studies content topics and subtopics and the focusing themes, see the Social Studies Assessment Targets in the body of Chapter 2 of the *Assessment Guide for Educators*.

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Chapter  
**3**

# Assessment Guide <sup>for</sup> Educators

A guide to the 2014 assessment content from GED Testing Service

July 2014 | Update

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## What's New in Chapter 3 (July 2013 Update)

The Assessment Guide for Educators provides adult education professionals key information about the upcoming 2014 GED® test. Since publishing the first version of the guide in early 2012, GED Testing Service received questions and feedback from the field. The guide was updated in November 2012 to provide answers to questions and clarification where needed based on this feedback. This July 2013 update contains some minor adjustments related to additional data received from the 2012 field testing.

Updates in Chapter 3 include:

- *Reasoning Through Language Arts Extended Response Rubric* includes a revision to the rubric scale (changing from a 0-12 scale to a 0-6 scale). See pages 3.8 – 3.10.
- *Social Studies Extended Response Rubric* includes a revision to the rubric scale (changing from a 0-7 scale to a 0-4 scale). See pages 3.11 – 3.13.
- The text on pages 3.5, 3.6, and 3.7 has been adjusted to reflect the changes in the rubric scales for the RLA and Social Studies extended response items.




# The Development Cycle of a Short Answer Item


The new GED® assessment will feature a variety of item types that will allow us to measure the full breadth and depth of each of the four content areas: mathematics, RLA, science, and social studies. Short answer (SA) items will appear on only the Science Test. SA items will allow us to measure a wide range of skills identified in the assessment targets of both content areas at a higher cognitive level than traditional multiple choice (MC) items.

This chapter focuses on the SA item development and scoring processes.

## Measuring Complex Content through Short Answer Items

The tasks that appear in SA items will be much more like problems the GED® test-takers will encounter in their daily lives, whether writing papers or reports in a postsecondary course of study, or problem solving in the workplace. Although MC items continue to be a proven, reliable method for obtaining information about a test-taker’s mastery of various skills, SA items will allow us to observe how test-takers apply a wider variety of cognitive strategies to the same content in a more authentic, real-world environment.

 **Multiple choice** items will continue to appear on all four content areas of the new GED® assessment. Each multiple choice item will have four answer options with only one correct answer.

 For more information about each item type and how they will be used in each content area, see the GED® Content Terminology Short Reference and the Item Types Across Content Areas section in the Assessment Guide for Educators Chapter 1 document.

## Science Test Examples

<p><b>Science Test MC Item:</b></p> <p>Identify which step [out of four listed] would produce a particular outcome in a scientific process?</p>	<p><b>Science Test SA Item:</b></p> <p>Design an experiment to test the hypothesis [given in the stimulus]. Be sure to include descriptions of your data collection process and data analysis in your response.</p>
<p>Advantage: SA items allow test developers to access a higher level of cognitive complexity because they require test-takers to express a response in their own words.</p>	

In keeping with the challenge set forth by career- and college-readiness standards, SA items allow us to assess a test-taker’s fluency with content and career- and college-readiness skills in a manner that reflects both the utility and the versatility of these skills.

### Developing Short Answer Scoring Guides

Each SA item on the new GED® assessment will be scored on a three-point scale. For some items, the three points will be accumulated when the test-takers identify or analyze up to three specific details or correct answers. This type of SA can be scored analytically, or empirically, with one point given for each correct part in a test-taker’s response. Other items, however, will be scored holistically. In these items, each point will reflect a range of possible test-taker responses, with varying levels of correctness. This style of SA is particularly effective at measuring a test-taker’s skills with regard to summarizing or synthesizing information.

Because each item will have its own rules for scoring, scoring guides will be developed alongside the item itself in two stages. The completed guides will contain as broad a selection of responses as necessary to convey the types of answers that can receive full and partial credit. In the first stage of scoring guide development, test developers list possible correct answers that reflect the content target that the item intends to measure. For instance, if the SA item asks test-takers to identify three textual details that support a main idea in a passage, the preliminary scoring guide will list as many relevant phrases or sentences from the passage as necessary.

The second stage of SA scoring guide development takes place during the rangefinding process. The primary purpose of rangefinding is to select exemplars at each score point level from a representative sample of responses. These exemplars, which are drawn from the pool of responses created when the items are field tested, serve to help train both human scorers and automated scoring engines. Because test-takers can be both creative and insightful, they may come up with correct responses to a given SA item that the test developers did not anticipate when drafting the preliminary scoring guides. Therefore, SA scoring guides are often updated and completed during the rangefinding



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“Because each item will have its own rules for scoring, scoring guides will be developed alongside the item itself.”

process, incorporating answers or common phrasings that have been directly observed in test-taker responses during the field test.

Scoring guides broadly represent the variety of answers found in the sample pool. After finalization, the scoring guides are used with the exemplars to train human scorers. Once all items from field testing have been scored by humans, the scoring guides and exemplars are used to train the automated scoring engine. The automated engine replicates human scoring and will then be used to score items on the operational tests, ensuring that test-takers are not only measured on their demonstration of higher-order thinking skills, but that they also receive feedback on their test scores as quickly as possible.



# Extended Response Scoring Rubrics

Both Reasoning Through Language Arts (RLA) and Social Studies tests will each feature one extended response (ER) item that will require test-takers to analyze source texts and use evidence to support their arguments. Each ER will be scored by a three-trait rubric. These three traits explicitly identify the qualities of a test-taker’s writing that will be evaluated. For example, the development of an organizational structure is an important quality of writing that is included in Trait 2 (see below).

In the RLA rubric, these three traits are adapted from Anchor Standards in the Common Core State Standards for English Language Arts. Likewise, the traits in the Social Studies rubric are derived from the Common Core State Standards for Literacy in History/Social Studies. Both rubrics focus on three key elements of writing:

- Creation of Arguments and Use of Evidence
- Development of Ideas and Organizational Structure
- Clarity and Command of Standard English Conventions

On the RLA test, test-takers will be given 45 minutes in a separately-timed section to read two source texts, compose a response, and review and edit what they’ve written. These responses will be scored on a 6-point scale with each trait being worth up to two points.<sup>1</sup> The final raw score on the ER item is then double-weighted so that it will represent up to 12 raw score points on the overall RLA test.

The extended response item on the Social Studies test is similar to the RLA extended response; however, it will be a 25-minute task in its own separately-timed section in which test-takers focus on the analysis of primary and secondary source documents. Because the Social Studies ER is shorter than the RLA ER, it will be scored on a 4-point scale. The first trait will be worth up to two points, and the second and third traits will be worth one point each. The final raw score on the Social Studies ER item is then double-weighted so that

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“Each extended response will be scored by a three-trait rubric. These three traits in the rubrics explicitly identify the qualities of test-takers’ writing that are to be evaluated.”

<sup>1</sup> Non-scorable exceptions, which receive a score of 0, are noted below each trait.

it represents up to 8 raw score points on the overall Social Studies test.

**A Word on Holistic Scoring vs. Analytic Scoring**

Holistic scoring is a method through which readers evaluate a test-taker’s writing as a whole, based on a number of criteria (e.g., how well the test-taker develops ideas, how well he or she maintains focus on a main idea throughout the writing sample, etc.). Analytic scoring, on the other hand, is a method through which test-taker responses are evaluated on several dimensions separately. In analytic scoring, points are usually added for each dimension present or subtracted from each dimension missing. This is unlike holistic scoring, in which points are awarded at the end of an evaluation for the response’s overall impression on the reader.

The new GED® Extended Response (ER) items will be scored using a hybrid approach. The multi-trait rubrics used to score both the Reasoning Through Language Arts (RLA) ER and the Social Studies ER break down the criteria on which responses will be evaluated into three categories or traits:

- Creation of Arguments and Use of Evidence
- Development of Ideas and Organizational Structure
- Clarity and Command of Standard English Conventions

Within each of these traits, there are several criteria or dimensions, each of which is weighted equally when readers are assigning scores to individual responses. For instance, in Trait 1 of the RLA rubric, we look for three main qualities in test-takers’ writing samples: a) how well the test-taker establishes an argument and uses information from given source texts to support that stance, b) how well s/he analyzes the issue and/or validity of argument presented in the source texts, and c) how well the test-taker integrates evidence from the source text with his or her own ideas about the topic.

For RLA, each of these three dimensions are taken together to determine a score for Trait 1 on a 0 to 2 scale. No two responses are the same. Some may be stronger in one dimension, while others have strengths in another. However, these dimensions can compensate for each other to some

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“In analytic scoring, points are usually added for each dimension present or subtracted from each dimension missing, unlike holistic scoring, in which points are awarded at the end of an evaluation for the response’s overall impression on the reader.”

degree such that, on balance, responses that demonstrate similar levels of overall proficiency will be given similar scores. Similarly, Traits 2 and 3 have multiple dimensions that readers must weigh together in order to determine scores on those traits. In other words, each trait constitutes a holistic rubric unto itself.

However, because we have divided scores into three traits, and scores from all three traits are added together to determine an individual test-taker’s score on the ER, the multi-trait rubric can also be considered partially analytic. On the RLA ER, test-takers can earn up to 2 points on each trait, or up to 6 points overall, though the final score is then double-weighted to represent the importance of writing skills in the test-taker’s overall score on the RLA test. On the Social Studies ER, test-takers can earn up to 2 points on Trait 1 and up to 1 point on Traits 2 and 3, respectively, for a possible total of up to 4 points overall. As on the RLA test, the raw score for the Social Studies ER item is doubled before calculation of a test-taker’s final raw score on the Social Studies test.

This scoring model, which brings together the added precision of analytic scoring with the compensatory, balanced approach of holistic scoring, will allow us to give scores that most accurately reflect test-takers’ abilities to write arguments. To learn more about the writing of arguments, see the Common Core State Standards Writing Standards at [www.corestandards.org](http://www.corestandards.org).



## RLA Extended Response Scoring Rubric

Score	Description
<b>Trait 1: Creation of Arguments and Use of Evidence</b> <b>A</b>	
2	<ul style="list-style-type: none"> <li>generates <b>text-based argument(s)</b> and establishes a <b>purpose that is connected</b> to the prompt <b>B</b></li> <li>cites relevant and specific <b>evidence from source text(s)</b> to support argument (may include few irrelevant pieces of evidence or unsupported claims) <b>C</b></li> <li>analyzes the issue and/or evaluates the <b>validity of the argumentation</b> within the source texts (e.g., distinguishes between supported and unsupported claims, makes reasonable inferences about underlying premises or assumptions, identifies fallacious reasoning, evaluates the credibility of sources, etc.) <b>D</b></li> </ul>
1	<ul style="list-style-type: none"> <li>generates an <b>argument</b> and demonstrates some <b>connection</b> to the prompt</li> <li>cites some <b>evidence from source text(s)</b> to support argument (may include a mix of relevant and irrelevant citations or a mix of textual and non-textual references)</li> <li>partially <b>analyzes the issue</b> and/or <b>evaluates the validity of the argumentation</b> within the source texts; may be simplistic, limited, or inaccurate</li> </ul>
0	<ul style="list-style-type: none"> <li>may attempt to create an <b>argument OR lacks purpose or connection</b> to the prompt OR does neither</li> <li>cites <b>minimal or no evidence from source text(s)</b> (sections of text may be copied from source)</li> <li><b>minimally analyzes the issue</b> and/or <b>evaluates the validity of the argumentation</b> within the source texts; may completely lack analysis or demonstrate minimal or no understanding of the given argument(s)</li> </ul>

### Non-scorable Responses (Score of 0/Condition Codes)

Response exclusively contains text copied from source text(s) or prompt

Response shows no evidence that test-taker has read the prompt or is off-topic

Response is incomprehensible

Response is not in English

Response has not been attempted (blank)

**A** Trait 1: Responses are scored according to the criteria outlined in all three bullets. Each bullet represents a distinct **dimension or quality of writing** that involves the creation of arguments and use of evidence. Each score point describes the same dimensions, but at varying levels of mastery. Responses may exhibit qualities indicative of more than one score point. For instance, a response may contain a logical text-based argument and sufficient support (a 2-point response), but the integration of claims might be simplistic (a 1-point response). When a response shows mixed evidence of proficiency levels, it will receive a score that reflects a balanced consideration of each quality, with no one dimension weighted more than the others.

**B** The first dimension relates to making claims or assertions. At higher score points, arguments will be focused on close reading and analysis of the source texts. As responses ascend the scale in this dimension, they will become more focused on making arguments.

**C** The second dimension focuses on a test-taker's ability to use information from the source texts to support their claims or assertions. As responses ascend the scale in this dimension, they will use evidence that is progressively more tied to the text. At lower score points, the test-taker may rely more heavily on evidence drawn from personal experience with the topic rather than from text-based evidence. While responses that argue the test-taker's own opinion on the issue are acceptable, test-takers who focus more specifically on the task outlined in the prompt, which asks them to analyze source texts to determine which position is better supported, will be more likely to score highly on this dimension. More specifically, responses that establish criteria for the evaluation of the source texts and then apply these criteria to specific text-based evidence are most likely to score highest in this dimension.

**D** The third dimension focuses on a test-taker's ability to critically evaluate the rhetorical strategies and argumentation demonstrated by the authors of the source texts. While responses that argue the test-taker's own opinion on the issue are acceptable, test-takers who focus more specifically on the task outlined in the prompt, which asks them to analyze source texts to determine which position is better supported, will be more likely to score highly on this dimension. More specifically, responses that establish criteria for the evaluation of the source texts and then apply these criteria to specific text-based evidence are most likely to score highest in this dimension.

**(NOTE:** There is no letter I and no letter O in the lettered annotations to avoid confusion with the numbers 1 and 0)

Score	Description
<b>Trait 2: Development of Ideas and Organizational Structure</b> <b>E</b>	
2	<ul style="list-style-type: none"> <li>contains <b>ideas</b> that are well <b>developed</b> and generally logical; most ideas are <b>elaborated</b> upon <b>F</b></li> <li>contains a sensible <b>progression of ideas</b> with clear connections between details and main points <b>G</b></li> <li>establishes an <b>organizational structure</b> that conveys the message and purpose of the response; applies <b>transitional devices</b> appropriately <b>H</b></li> <li>establishes and maintains a formal style and appropriate tone that demonstrate awareness of the audience and purpose of the task <b>J</b></li> <li><b>chooses specific words</b> to express ideas clearly <b>K</b></li> </ul>
1	<ul style="list-style-type: none"> <li>contains <b>ideas that are inconsistently developed</b> and/or may reflect simplistic or vague reasoning; <b>some ideas are elaborated</b> upon</li> <li>demonstrates <b>some evidence of a progression of ideas</b>, but details may be disjointed or lacking connection to main ideas</li> <li>establishes an <b>organization structure that may inconsistently</b> group ideas or is partially effective at conveying the message of the task; <b>uses transitional devices inconsistently</b></li> <li>may <b>inconsistently</b> maintain a formal style and appropriate tone to demonstrate an <b>awareness of the audience and purpose of the task</b></li> <li>may occasionally <b>misuse words</b> and/or choose words that express ideas in vague terms</li> </ul>
0	<ul style="list-style-type: none"> <li>contains ideas that are <b>insufficiently or illogically developed</b>, with <b>minimal or no elaboration</b> on main ideas</li> <li>contains an <b>unclear or no progression of ideas</b>; details may be absent or irrelevant to the main ideas</li> <li>establishes an <b>ineffective or no discernable organizational structure</b>; does not apply transitional devices, or does so inappropriately</li> <li>uses an informal style and/or inappropriate tone that demonstrates <b>limited or no awareness of audience and purpose</b></li> <li>may <b>frequently misuse words</b>, overuse slang or express ideas in a vague or repetitious manner</li> </ul>

**Non-scorable Responses (Score of 0/Condition Codes)**

- Response exclusively contains text copied from source text(s) or prompt
- Response shows no evidence that test-taker has read the prompt or is off-topic
- Response is incomprehensible
- Response is not in English
- Response has not been attempted (blank)

- E** The five bullets, or dimensions, in Trait 2 must be considered together to determine the score of any individual response. No one dimension is weighted more than any other. Each score point describes the same dimensions, but at varying levels of mastery.
- F** The first dimension relates to the depth and breadth of explanation exhibited in the response. While support for ideas should come from the source texts (like in Trait 1), fully developed ideas are often extended with additional evidence that builds upon central assertions. High-scoring papers will tend to contain multiple ideas that are fully elaborated upon and help articulate a central thesis. Responses that develop ideas insufficiently, unevenly, or illogically fall into the lower score ranges with regard to this dimension.
- G** The second dimension focuses on how effectively the response builds from one idea to the next as well as the degree in which details and central ideas are linked. High-scoring responses will maintain coherence and a sense of progression that help convey the writer’s central thesis. Responses at lower score points demonstrate an increasingly disjointed or unclear progression of ideas. Details are increasingly unrelated to central ideas, or even absent.
- H** The third dimension relates to how well the response is organized. Though paragraphs may lend structure to many responses, it is possible for a well-organized, logical, non-paragraphed response to receive a high score. However, responses that contain circular, list-like, or scattered organizational structure, as well as those that do not fully integrate effective transitions between ideas, are often indicative of lower score points.
- J** The fourth dimension is associated with how well the response demonstrates an understanding of audience and purpose. Responses that score highly in this dimension will establish and maintain a formal style and objective tone while attending to the norms and conventions of argumentative writing.
- K** The fifth dimension focuses on word choice. Effective word choice does not necessarily suggest that test-takers must employ a great deal of advanced vocabulary. Advanced vocabulary used correctly is often associated with a higher score on Trait 2, but responses that reflect a precision in word choice are just as likely to score well in this dimension. At lower score points, imprecise, vague and/or misused words are more prevalent.



Score	Description
<b>Trait 3: Clarity and Command of Standard English Conventions <span style="float: right;">L</span></b>	
2	<ul style="list-style-type: none"> <li>• demonstrates <b>largely correct sentence structure</b> and a <b>general fluency</b> that enhances clarity with specific regard to the following skills: <span style="float: right;">M</span> <ol style="list-style-type: none"> <li>1) varied sentence structure within a paragraph or paragraphs</li> <li>2) correct subordination, coordination and parallelism</li> <li>3) avoidance of wordiness and awkward sentence structures</li> <li>4) usage of transitional words, conjunctive adverbs and other words that support logic and clarity</li> <li>5) avoidance of run-on sentences, fused sentences, or sentence fragments</li> </ol> </li> <li>• demonstrates <b>competent application of conventions</b> with specific regard to the following skills: <span style="float: right;">N</span> <ol style="list-style-type: none"> <li>1) frequently confused words and homonyms, including contractions</li> <li>2) subject-verb agreement</li> <li>3) pronoun usage, including pronoun antecedent agreement, unclear pronoun references, and pronoun case</li> <li>4) placement of modifiers and correct word order</li> <li>5) capitalization (e.g., proper nouns, titles, and beginnings of sentences)</li> <li>6) use of apostrophes with possessive nouns</li> <li>7) use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation)</li> </ol> </li> <li>• <b>may contain some errors in mechanics and conventions</b>, but they do not interfere with comprehension; overall, standard usage is at a level appropriate for on-demand draft writing. <span style="float: right;">P</span></li> </ul>
1	<ul style="list-style-type: none"> <li>• demonstrates <b>inconsistent sentence structure</b>; may contain some repetitive, choppy, rambling, or awkward sentences that may detract from clarity; demonstrates inconsistent control over skills 1-5 as listed in the first bullet under Trait 3, Score Point 2 above</li> <li>• demonstrates <b>inconsistent control of basic conventions</b> with specific regard to skills 1 – 7 as listed in the second bullet under Trait 3, Score Point 2 above</li> <li>• <b>may contain frequent errors in mechanics and conventions</b> that occasionally interfere with comprehension; standard usage is at a minimally acceptable level of appropriateness for ondemand draft writing.</li> </ul>
0	<ul style="list-style-type: none"> <li>• demonstrates <b>consistently flawed sentence structure</b> such that meaning may be obscured; demonstrates minimal control over skills 1-5 as listed in the first bullet under Trait 3, Score Point 2 above</li> <li>• demonstrates <b>minimal control of basic conventions</b> with specific regard to skills 1 – 7 as listed in the second bullet under Trait 3, Score Point 2 above</li> <li>• contains <b>severe and frequent errors in mechanics and conventions</b> that interfere with comprehension; overall, standard usage is at an unacceptable level for on-demand draft writing.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• <b>response is insufficient</b> to demonstrate level of mastery over conventions and usage</li> </ul>

**L** As in the previous two traits, each of the three dimensions of Trait 3 must be weighed together to determine the score. Each score point describes the same dimensions, but at varying levels of mastery.

**M** This dimension relates to sentence structure and variety. Scoring will focus only on these skills essential to the development of sentence structure. High-scoring responses mix simple and compound sentences and purposefully incorporate a variety of clauses to enhance overall fluidity. Repetitive, choppy, rambling, and/or awkward sentence constructions are indicative of responses at the lower score points.

**N** The second dimension focuses on how well the response maintains specific conventions of standard English. Responses will be scored on the basis of a test-taker’s demonstrated mastery over the particular language skills listed in this dimension. Though there are many other conventions that come into play in a test-taker’s writing, these essential skills are the ones on which they will be scored. Further, the longer the response, the greater tolerance for errors. For example, 10 errors in a 10-line response will likely receive a lower score than a response that contains 20 errors but is 60 lines long.

**P** The third dimension pertains to overall fluency with conventions and mechanics. In order to receive a score higher than 1, test-takers must sustain their writing long enough to demonstrate their level of proficiency with all the skills listed in the two previous dimensions. Then, writing samples are evaluated for level of grammatical and syntactical fluency appropriate for on-demand, draft writing.

\*Because test-takers will be given only 45 minutes to complete Extended Response tasks, there is no expectation that a response should be completely free of conventions or usage errors to receive a score of 2.

**Non-scorable Responses (Score of 0/Condition Codes)**

- Response exclusively contains text copied from source text(s) or prompt
- Response shows no evidence that test-taker has read the prompt or is off-topic
- Response is incomprehensible
- Response is not in English
- Response has not been attempted (blank)

## Social Studies Extended Response Scoring Rubric

Score	Description
<b>Trait 1: Creation of Arguments and Use of Evidence</b> <b>A</b>	
2	<ul style="list-style-type: none"> <li>Generates a <b>text-based argument</b> that demonstrates a clear understanding of the historical <b>relationships among ideas, events, and figures as presented in the source text(s)</b> and the contexts from which they are drawn <b>B</b></li> <li>Cites relevant and specific <b>evidence from primary and secondary source text(s)</b> that adequately supports an argument <b>C</b></li> <li>Is well-connected to both the prompt and the source text(s) <b>D</b></li> </ul>
1	<ul style="list-style-type: none"> <li>Demonstrates an <b>understanding of the relationships among ideas, events, and figures as presented in the source text(s)</b></li> <li>Cites some <b>evidence from primary and secondary source texts</b> in support of an argument (may include a mix of relevant and irrelevant textual references)</li> <li>Is <b>connected to both the prompt and the source text(s)</b></li> </ul>
0	<ul style="list-style-type: none"> <li>Demonstrates minimal or no <b>understanding of the ideas, events and figures presented in the source texts</b> or the contexts from which these texts are drawn</li> <li>Cites minimal or <b>no evidence from the primary and secondary source texts</b>; may or may not demonstrate an <b>attempt to create an argument</b></li> <li>Lacks <b>connection either to the prompt or the source text(s)</b></li> </ul>

### Non-scorable Responses (Score of 0/Condition Codes)

- Response exclusively contains text copied from source text(s) or prompt
- Response demonstrates that the that test-taker has read neither the prompt nor the source text(s)
- Response is incomprehensible
- Response is not in English
- Response has not been attempted (blank)

**A** For Trait 1, test-taker responses are scored according to the criteria outlined in three bullets, each of which represents a distinct **dimension or quality of writing** that contributes to the creation of arguments and use of evidence. Each score point describes the same three dimensions, but at varying levels of mastery. Responses may exhibit qualities indicative of more than one score point. For instance, a response may contain a logical text-based argument (a 2-point response), but the evidence cited may include both relevant and irrelevant references (a 1-point response). When a response shows mixed evidence of proficiency level with regard to the three dimensions of Trait 1, it will receive a score that reflects a balanced consideration of each quality, with no one dimension weighted more than the others.

**B** The first dimension relates to writing a rhetorical argument about the connection between the two source texts. Responses that score highly will bring the test-taker’s own content knowledge of the enduring issue referenced in the quotation and/or the event and context referenced in the passage to bear on his or her stance. Responses that receive a lower score may rely on summarizing the source texts, discussing the test-taker’s own experiences with the topic, or addressing whether or not the test-taker agrees with the positions taken in the texts.

**C** The second dimension focuses on using information from source text(s) to support the test-taker’s claims or assertions. Higher scoring responses cite multiple pieces of text-based evidence in support of the writer’s assertions. Higher scoring responses will incorporate evidence progressively more effectively and feature arguments more closely focused on the source texts. At lower score points, the prevalence of summary and evidence drawn from a test-taker’s personal experience may be more pronounced.

**D** The third dimension focuses on the degree to which the response reflects the task given in the prompt and integrates information from the source text into it. While responses that argue the test-taker’s opinion are acceptable, test-takers who focus more specifically on the task outlined in the prompt and establish an argument based on a close reading of the source text will be more likely to score higher on this dimension. Higher scoring responses will link both texts to the development of an argument about how the position taken by the author of the passage reflects the enduring issue presented in the quotation..

Score	Description
<b>Trait 2: Development of Ideas and Organizational Structure</b> <b>E</b>	
1	<ul style="list-style-type: none"> <li>Contains a sensible <b>progression of ideas</b> with understandable connections between details and main ideas <b>F</b></li> <li>Contains <b>ideas</b> that are <b>developed</b> and generally logical; multiple ideas are elaborated upon <b>G</b></li> <li>Demonstrates appropriate <b>awareness of audience</b> and the <b>purpose of the task</b> <b>H</b></li> </ul>
0	<ul style="list-style-type: none"> <li>Contains an unclear or no apparent <b>progression of ideas</b></li> <li>Contains <b>ideas</b> that are insufficiently <b>developed</b> or illogical; <b>just one idea is elaborated upon</b></li> <li>Demonstrates no <b>awareness of the task</b></li> </ul>

**Non-scorable Responses (Score of 0/Condition Codes)**

- Response exclusively contains text copied from source text(s) or prompt
- Response demonstrates that the that test-taker has read neither the prompt nor the source text(s)
- Response is incomprehensible
- Response is not in English
- Response has not been attempted (blank)

**E** The three bullets, or dimensions, in Trait 2 must be considered together to determine the score of any individual response. No one dimension is weighted more than any other. Each score point describes the same dimensions, but at varying levels of mastery.

**F** The first dimension focuses on how well the response is organized and how effectively the response builds from one idea to the next. Though paragraphs may lend structure to many responses, it is possible for a well-organized, logical, non-paragraphed response to receive a high score. However, responses that contain circular, list-like, or scattered organizational structure, as well as those that do not fully integrate effective transitions between ideas, often indicate a lower score point. High-scoring responses will maintain coherence and a sense of progression that aid in conveying the writer’s central thesis.

**G** The second dimension relates to the depth and breadth of explanation exhibited in the response. While support for ideas should come from the source texts (like Trait 1), fully developed ideas often contain multiple extensions that build upon assertions. High-scoring papers will tend to contain multiple ideas that are fully elaborated upon and help articulate a central thesis. Responses that develop ideas insufficiently, unevenly, or illogically fall into a lower score range with regard to this dimension.

**H** The third dimension is associated with how well the response demonstrates an understanding of audience and purpose. Higher scoring responses will establish and maintain a formal style and objective tone while attending to the norms and conventions of argumentative writing.

**(NOTE:** There is no letter I in the lettered annotations to avoid confusion with the number 1)

Score	Description
<b>Trait 3: Clarity and Command of Standard English Conventions</b> <b>J</b>	
1	<ul style="list-style-type: none"> <li>• Demonstrates adequate applications of <b>conventions</b> with specific regard to the following skills: <b>K</b> <ol style="list-style-type: none"> <li>1) frequently confused words and homonyms, including contractions</li> <li>2) subject-verb agreement</li> <li>3) Pronoun usage, including pronoun antecedent agreement, unclear pronoun references, and pronoun case</li> <li>4) Placement of modifiers and correct word order</li> <li>5) Capitalization (e.g., proper nouns, titles, and beginnings of sentences)</li> <li>6) Use of apostrophes with possessive nouns</li> <li>7) Use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation)</li> </ol> </li> <li>• Demonstrates largely correct <b>sentence structure</b> with variance from sentence to sentence; is <b>generally fluent</b> and clear with specific regard to the following skills: <b>L</b> <ol style="list-style-type: none"> <li>1) Correct subordination, coordination and parallelism</li> <li>2) Avoidance of wordiness and awkward sentence structures</li> <li>3) Usage of transitional words, conjunctive adverbs and other words that support logic and clarity</li> <li>4) Avoidance of run-on sentences, fused sentences, or sentence fragments</li> <li>5) Standard usage at a level of formality appropriate for on-demand, draft writing.</li> </ol> </li> <li>• May contain some errors in <b>mechanics and conventions</b>, but they do not interfere with understanding* <b>M</b></li> </ul>
0	<ul style="list-style-type: none"> <li>• Demonstrates minimal control of basic <b>conventions</b> with specific regard to skills 1 – 5 as listed in the first bullet under Trait 3, Score Point 2 above</li> <li>• Demonstrates consistently flawed <b>sentence structure</b> minimal or no variance such that meaning may be obscured; demonstrates minimal control over skills 1-5 as listed in the second bullet under Trait 3, Score Point 2 above</li> <li>• Contains severe and frequent errors in <b>mechanics and conventions</b> that interfere with comprehension</li> </ul> <p style="margin-left: 20px;">Or</p> <ul style="list-style-type: none"> <li>• <b>Response is insufficient</b> to demonstrate level of mastery over conventions and usage</li> </ul>

- J** As in the previous two traits, each of the three dimensions of Trait 3 must be weighed together to determine the score. Each score point describes the same dimensions, but at differing levels of mastery.
- K** The first dimension focuses on how well the response adheres to specific conventions of standard English for on-demand draft writing. Responses will be scored on demonstrated mastery over the particular language skills listed in this dimension. Though there are many other conventions that come into play in a test-taker's writing, these essential skills are the ones on which responses will be scored. Further, the longer the response, the greater tolerance for errors. For example, 10 errors in a 10-line response would likely receive a lower score than a response that contains 20 errors but fills 40 or 50 lines.
- L** This dimension relates to sentence structure and variety. As in the first dimension described above, scoring will focus only on these skills essential to the development of sentence structure. Repetitive, choppy, rambling, and/or awkward sentence constructions indicate responses at the lower score point.
- M** This dimension pertains to overall fluency with conventions and mechanics. In order to receive a score of 1, test-takers must sustain their writing long enough to demonstrate their level of proficiency with all the skills listed in the two previous dimensions. Then, responses are evaluated for level of grammatical and syntactical fluency appropriate for on-demand, draft writing.

\*Because test-takers will be given only 25 minutes to complete Extended Response tasks, there is no expectation that a response should be completely free of conventions or usage errors to receive a score of 1.

**Non-scorable Responses (Score of 0/Condition Codes)**

- Response exclusively contains text copied from source text(s) or prompt
- Response demonstrates that the that test-taker has read neither the prompt nor the source text(s)
- Response is incomprehensible
- Response is not in English
- Response has not been attempted (blank)

# Reporting Category Descriptions for Content Areas

One of our goals for the score reports on the new GED® assessment is to provide additional information about areas of strength and developmental need. In order to generate this information, we have grouped indicators from each content area’s assessment targets into reporting categories. Points that test-takers earn in each category will contribute to sub-scores from each content area. The primary purpose of these sub-scores will be to give guidance to both test-takers and their instructors so that each test-taker can successfully achieve his or her GED® test credential.

Below are a series of brief descriptions of the types of skills that will be assessed in each individual reporting category. The descriptions of each reporting category are illustrative, not exhaustive.

## Reasoning Through Language Arts Reporting Category Descriptions

### Reporting Category 1: Analyzing and creating text features and technique

Examples of skills measured in RLA Reporting Category 1:

- Analyzing essential elements of both literary and informational texts
- Analyzing how parts of a text fit into the overall structure
- Analyzing an author’s point of view or purpose and the rhetorical techniques authors use to advance meaning

### Reporting Category 2: Using evidence to understand, analyze, and create arguments

Examples of skills measured in RLA Reporting Category 2:

- Analyzing arguments and using evidence to demonstrate close-reading skills

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“The primary purpose of these sub-scores will be to give guidance to both test-takers and their instructors so that each test-taker can successfully achieve his or her GED® test credential.”



**From Chapter 2:**  
The strongest

predictor of career and college readiness is the ability to read and comprehend complex texts, especially in nonfiction. The RLA Test will include texts from both academic and workplace contexts that range from simple to complex.

- Identifying and evaluating an author’s underlying premise(s)
- Distinguish between supported and unsupported claims, and assessing the validity of an author’s reasoning
- Comparing two or more sources to analyze differences in use of evidence, interpretation, overall impact, and other modes of argument making
- Writing their own arguments in which they synthesize details, draw conclusions, and apply information from given source texts

**Reporting Category 3: Applying knowledge of English language conventions and usage**

Examples of skills measured in RLA Reporting Category 3:

- Demonstrating sufficient command of essential standard English conventions and usage Correcting common grammatical or usage errors
- Demonstrating fluency with these skills in their own writing

***Note:** Refer to Appendix A of this chapter to view the detailed indicators that are captured in each of the Reasoning Through Language Arts reporting categories.*



# Mathematical Reasoning Reporting Category Descriptions

## Reporting Category 1: Quantitative problems in rational numbers

Examples of skills measured Mathematics Reporting Category 1:

- Demonstrating fluency with operations using rational numbers
- Using rational numbers to formulate solutions to problems set within real-world contexts
- Solving problems with rational numbers that involve proportionality

## Reporting Category 2: Quantitative problems in measurement

Examples of skills measured in Mathematics Reporting Category 2:

- Engaging with geometric figures in a variety of graphic presentations
- Engaging with descriptive statistics in a variety of graphic presentations
- Using formulas or decomposition to calculate perimeter, area, surface area, and volume of figures
- Using descriptive statistics to summarize and compare data sets and understand concepts relating to basic theoretical probability

## Reporting Category 3: Linear equations and expressions

Examples of skills measured in Mathematics Reporting Category 3:

- Writing linear mathematical expressions and equations that correspond to given situations
- Evaluating the expressions for specific values of the variable



**From Chapter 2: The GED® Mathematics**

Test will focus on two major content areas: quantitative problem solving and algebraic problem solving.

- Solving linear equations, inequalities, and systems of linear equations and find the equation of a line with varying criteria
- Interpreting slope of a line as rate of change or unit rate

**Reporting Category 4: Function concepts and nonlinear expressions and equations**

Examples of skills measured in Mathematics Reporting Category 4:

- Understanding and applying the concept of a function
- Using function notation
- Translating a variety of representations of a function, including tables and equations
- Solving quadratic equations
- Interpreting key features of both linear and nonlinear functions

**Important note regarding the Mathematical Reasoning reporting categories:**

Although the Mathematical Practices (as described on pages 2.27 and 2.28 of the Assessment Guide for Educators) are an important aspect of what is assessed on the Mathematical Reasoning test module, you may note that the practices are not directly reflected in the reporting categories as described above. This is due to the fact that the Mathematical Practices are integrated only into some, but not all, items on the Mathematical Reasoning test. Test-takers, however, will be receiving much more detailed information both on the skills they possess and on those they need to develop than ever before. With this additional information, adult educators will be in a position to focus their work with test-takers on critical skill development needs. Refer to Appendix B of this chapter to view the detailed indicators that are captured in each of the Mathematical Reasoning reporting categories.

The reporting information provided by the 2014 GED® test is one of the most important elements of the new assessment



system. Gaining a firm understanding of the reporting categories on the GED® test will help adult educators in planning how they can best help adult learners to gain the skills they will need to be successful both on the test and in the future pathway they ultimately pursue.



## Science Reporting Category Descriptions

### Reporting Category 1: Analyzing scientific and technical arguments, evidence, and text-based information

Examples of skills measured in Science Reporting Category 1:

- Analyzing scientific and technical texts to determine hypotheses, data, conclusions
- Citing evidence within the text that supports the hypotheses and conclusions
- Thinking critically about texts to determine facts versus opinion and evaluate an author’s claims
- Summarizing scientific texts and evaluate key terms and relationships among concepts within the text

### Reporting Category 2: Applying scientific processes and procedural concepts

Examples of skills measured in Science Reporting Category 2:

- Applying scientific reasoning skills to a broad range of content
- Creating and explaining the features of a hypothesis
- Conducting and critiquing experimental procedures
- Making generalizations and drawing valid conclusions from experimental data

### Reporting Category 3: Reasoning quantitatively and interpreting data in scientific contexts

Examples of skills measured in Science Reporting Category 3:

- Using mathematical techniques to interpret and analyze scientific data
- Engaging with data displayed in various graphic formats



### From Chapter 2: The GED® Science

Test will focus on the fundamentals of science reasoning, striking a balance of deeper conceptual understanding, procedural skill and fluency, and the ability to apply these fundamentals in realistic situations.

- Making calculations using a variety of statistical and probability techniques
- Identifying proper measurement practices and units, including conversions between units

**Important note regarding the Science reporting categories:**

The Science reporting categories are organized according to the Science Practices, rather than the Science content indicators. This organization has been chosen because the Science Practices are integrated into every item on the Science test and represent thinking and reasoning skills that are critical for adults to master. Although the content Topics and Subtopics are also reflected in all items, the Science content areas are too numerous for the test to be able to provide reliable and meaningful reporting data on them. Test-takers, however, will be receiving much more detailed information both on the skills they possess and on those they need to develop than ever before. With this additional information, adult educators will be in a position to focus their work with test-takers on critical skill development needs. Refer to Appendix C of this chapter to view the detailed information that is captured in each of the Science reporting categories.

The reporting information provided by the 2014 GED® test is one of the most important elements of the new assessment system. Gaining a firm understanding of the reporting categories on the GED® test will help adult educators in planning how they can best help adult learners to gain the skills they will need to be successful both on the test and in the future pathway they ultimately pursue.



## Social Studies Reporting Category Descriptions

### Reporting Category 1: Analyzing and creating text features in a social studies context

Examples of skills measured in Social Studies Reporting Category 1:

- Analyzing primary and secondary sources for various purposes
- Identifying aspects of a historical document that reveal the author’s point of view or purpose Distinguishing between unsupported claims and those that are grounded in evidence necessary for understanding concepts in the social sciences
- Determining the meaning of domain-specific words used in context

### Reporting Category 2: Applying social studies concepts to analysis and construction of arguments

Examples of skills measured in Social Studies Reporting Category 2:

- Applying social-studies-specific reasoning skills to a variety of tasks
- Examining the relationships among people, environments, events, processes, and ideas and accurately describing the chronological and/or causal nature of the relationships
- Comparing different ideas within social studies disciplines such as civics and economics, and examining the implications of these ideas
- Producing writing that thoroughly and logically develops an idea, claim, or argument based on primary and/or secondary source texts
- Supporting contentions with specific textual evidence from the source texts and demonstrating an understanding of the contexts in which these documents were written



### From Chapter 2: The GED® Social Studies

Test will focus on the fundamentals of social studies reasoning, striking a balance of deeper conceptual understanding, procedural skill and fluency, and the ability to apply these fundamentals in realistic situations.

### Reporting Category 3: Reasoning quantitatively and interpreting data in social studies contexts

Examples of skills measured in Social Studies Reporting Category 3:

- Analyzing data presented in a wide variety of formats, including maps, graphic organizers, photographs, and political cartoons
- Integrating analyses of quantitative data with analyses of written information to inform their understanding of the topic at hand
- Accurately using and interpreting graphs in order to analyze the differing ways in which variables are related to one another

#### Important note regarding the Social Studies reporting categories:

The Social Studies reporting categories are organized according to the Social Studies Practices, rather than the Social Studies content indicators. This organization has been chosen because the Social Studies Practices are integrated into every item on the Social Studies test. While the content indicators are also reflected in all items, the Social Studies content Topics and Subtopics are too numerous for the test to be able to provide reliable and meaningful reporting data. Test-takers, however, will be receiving much more detailed information both on the skills they possess and on those they need to develop than ever before. With this additional information, adult educators will be in a position to focus their work with test-takers on critical skill development needs. Refer to Appendix D of this chapter to view the detailed information that is captured in each of the Social Studies reporting categories.

The reporting information provided by the 2014 GED® test is one of the most important elements of the new assessment system. Gaining a firm understanding of the reporting categories on the GED® test will help adult educators in planning how they can best help adult learners to gain the skills they will need to be successful both on the test and in the future pathway they ultimately pursue.

# Appendix A

## Reasoning Through Language Arts Reporting Categories

The following table illustrates which Reasoning Through Language Arts (RLA) indicators support each reporting category.



<b>Reporting Category 1- Analyzing and creating text features and technique</b>		<b>35%</b>
<b>R.3.1</b>	Order sequences of events in texts	
<b>R.3.2</b>	Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts	
<b>R.3.3</b>	Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning	
<b>R.3.4</b>	Infer relationships between ideas in a text (e.g. an implicit cause and effect, parallel, or contrasting relationship)	
<b>R.3.5</b>	Analyze the roles that details play in complex literary or informational texts	
<b>R.6.1</b>	Determine an author’s point of view or purpose of a text	
<b>R.6.2</b>	Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints	
<b>R.6.3</b>	Infer an author’s implicit as well as explicit purposes based on details in text	
<b>R.6.4</b>	Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements)	
<b>R.4.1 / L.4.1</b>	Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context	
<b>R.4.2 / L.4.2</b>	Analyze how meaning or tone is affected when one word is replaced with another.	
<b>R.4.3 / L.4.3</b>	Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument	
<b>R.5.1</b>	Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	
<b>R.5.2</b>	Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).	
<b>R.5.3</b>	Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose	
<b>R.5.4</b>	Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose	
<b>R.9.1 / 7.1</b>	Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline)	

<b>R.7.3</b>	Compare two documents that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.	
<b>R.9.2</b>	Compare two passages in similar or closely related genre that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or overall impact	
<b>W.2</b>	Produce an extended analytic response in which the writer introduces the idea(s) or claim(s) clearly; creates an organization that logically sequences information; develops the idea(s) or claim(s) thoroughly with well-chosen examples, facts, or details from the text; and maintains a coherent focus.	
<b>Reporting Category 2- Using evidence to understand, analyze and create arguments</b>		<b>45%</b>
<b>R.2.1</b>	Comprehend explicit details and main ideas in text	
<b>R.2.2</b>	Summarize details and ideas in text	
<b>R.2.3</b>	Make sentence level inferences about details that support main ideas	
<b>R.2.4</b>	Infer implied main ideas in paragraphs or whole texts	
<b>R.2.5</b>	Determine which detail(s) support(s) a main idea	
<b>R.2.6</b>	Identify a theme, or identify which element(s) in a text support a theme	
<b>R.2.7</b>	Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations	
<b>R.2.8</b>	Draw conclusions or make generalizations that require synthesis of multiple main ideas in text	
<b>R.8.1</b>	Delineate the specific steps of an argument the author puts forward, including how the argument’s claims build on one another.	
<b>R.8.2</b>	Identify specific pieces of evidence an author uses in support of claims or conclusions	
<b>R.8.3</b>	Evaluate the relevance and sufficiency of evidence offered in support of a claim	
<b>R.8.4</b>	Distinguish claims that are supported by reasons and evidence from claims that are not	
<b>R.8.5</b>	Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact	
<b>R.8.6</b>	Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided	
<b>R.9.3</b>	Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretations of facts	
<b>R.7.2</b>	Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument	
<b>R.7.4</b>	Compare two passages that present related ideas or themes in different genre or formats in order to synthesize details, draw conclusions, or apply information to new situations	
<b>W.1</b>	Determine the details of what is explicitly stated and make logical inferences or valid claim that square with textual evidence.	
<b>Reporting Category 3- Applying knowledge of English language conventions and usage</b>		<b>20%</b>
<b>W.3</b>	Write clearly and demonstrate sufficient command of standard English conventions	
<b>L.1.1</b>	Edit to correct errors involving frequently confused words and homonyms, including contractions (passed, past; two, too, to; there, their, they’re; knew, new; it’s its)	
<b>L.1.2</b>	Edit to correct errors in straightforward subject-verb agreement	
<b>L.1.3</b>	Edit to correct errors in pronoun usage, including pronoun antecedent agreement, unclear pronoun references, and pronoun case	
<b>L.1.4</b>	Edit to eliminate non-standard or informal usage (e.g., correctly use try to win the game instead of try and win the game)	

<b>L.1.5</b>	Edit to eliminate dangling or misplaced modifiers or illogical word order (e.g., correctly use to meet almost all requirements instead of to almost meet all requirements)	
<b>L.1.6</b>	Edit to ensure parallelism and proper subordination and coordination	
<b>L.1.7</b>	Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns)	
<b>L.1.8</b>	Edit to eliminate wordiness or awkward sentence construction	
<b>L.1.9</b>	Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity	
<b>L.2.1</b>	Edit to ensure correct use of capitalization (e.g., proper nouns, titles, and beginnings of sentences)	
<b>L.2.2</b>	Edit to eliminate run-on sentences, fused sentences, or sentence fragments	
<b>L.2.3</b>	Edit to ensure correct use of apostrophes with possessive nouns	
<b>L.2.4</b>	Edit to ensure correct use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation)	



# Appendix B

## Mathematical Reasoning Reporting Categories

The following table illustrates which Mathematical Reasoning indicators support each reporting category.



<b>RC1: Quantitative problem solving with rational numbers</b>		<b>25%</b>
<b>Q.1.a</b>	Order fractions and decimals, including on a number line.	
<b>Q.1.b</b>	Apply number properties involving multiples and factors, such as using the least common multiple, greatest common factor, or distributive property to rewrite numeric expressions.	
<b>Q.1.c</b>	Apply rules of exponents in numerical expressions with rational exponents to write equivalent expressions with rational exponents.	
<b>Q.1.d</b>	Identify absolute value or a rational number as its distance from 0 on the number line and determine the distance between two rational numbers on the number line, including using the absolute value of their difference.	
<b>Q.2.a</b>	Perform addition, subtraction, multiplication, and division on rational numbers.	
<b>Q.2.b</b>	Perform computations and write numerical expressions with squares and square roots of positive, rational numbers.	
<b>Q.2.c</b>	Perform computations and write numerical expressions with cubes and cube roots of rational numbers.	
<b>Q.2.d</b>	Determine when a numerical expression is undefined.	
<b>Q.2.e</b>	Solve one-step or multi-step arithmetic, real world problems involving the four operations with rational numbers, including those involving scientific notation.	
<b>Q.3.a</b>	Compute unit rates. Examples include but are not limited to: unit pricing, constant speed, and persons per square mile, BTUs per cubic foot.	
<b>Q.3.b</b>	Use scale factors to determine the magnitude of a size change. Convert between actual drawings and scale drawings.	
<b>Q.3.c</b>	Solve multistep, arithmetic, real-world problems using ratios or proportions including those that require converting units of measure.	
<b>Q.3.d</b>	Solve two-step, arithmetic, real world problems involving percents. Examples include but are not limited to: simple interest, tax, markups and markdowns, gratuities and commissions, percent increase and decrease.	
<b>RC2: Quantitative problem solving in measurement</b>		<b>20%</b>
<b>Q.4.a</b>	Compute the area and perimeter of triangles and rectangles. Determine side lengths of triangles and rectangles when given area or perimeter.	
<b>Q.4.b</b>	Compute the area and circumference of circles. Determine the radius or diameter when given area or circumference	
<b>Q.4.c</b>	Compute the perimeter of a polygon. Given a geometric formula, compute the area of a polygon. Determine side lengths of the figure when given the perimeter or area.	
<b>Q.4.d</b>	Compute perimeter and area of 2-D composite geometric figures, which could include circles, given geometric formulas as needed.	
<b>Q.4.e</b>	Use the Pythagorean theorem to determine unknown side lengths in a right triangle.	
<b>Q.5.a</b>	When given geometric formulas, compute volume and surface area of rectangular prisms. Solve for side lengths or height, when given volume or surface area.	

<b>Q.5.b</b>	When given geometric formulas, compute volume and surface area of cylinders. Solve for height, radius, or diameter when given volume or surface area.	
<b>Q.5.c</b>	When given geometric formulas, compute volume and surface area of right prisms. Solve for side lengths or height, when given volume or surface area.	
<b>Q.5.d</b>	When given geometric formulas, compute volume and surface area of right pyramids and cones. Solve for side lengths, height, radius, or diameter when given volume or surface area.	
<b>Q.5.e</b>	When given geometric formulas, compute volume and surface area of spheres. Solve for radius or diameter when given the surface area.	
<b>Q.5.f</b>	Compute surface area and volume of composite 3-D geometric figures, given geometric formulas as needed.	
<b>Q.6.a</b>	Represent, display, and interpret categorical data in bar graphs or circle graphs.	
<b>Q.6.b</b>	Represent, display, and interpret data involving one variable plots on the real number line including dot plots, histograms, and box plots.	
<b>Q.6.c</b>	Represent, display, and interpret data involving two variables in tables and the coordinate plane including scatter plots and graphs.	
<b>Q.7.a</b>	Calculate the mean, median, mode and range. Calculate a missing data value, given the average and all the missing data values but one, as well as calculating the average, given the frequency counts of all the data values, and calculating a weighted average.	
<b>Q.8.a</b>	Use counting techniques to solve problems and determine combinations and permutations.	
<b>Q.8.b</b>	Determine the probability of simple and compound events.	
<b>Algebraic problem solving with expressions and equations</b>		<b>30%</b>
<b>A.1.a</b>	Add, subtract, factor, multiply and expand linear expressions with rational coefficients.	
<b>A.1.b</b>	Evaluate linear expressions by substituting integers for unknown quantities.	
<b>A.1.c</b>	Write linear expressions as part of word-to-symbol translations or to represent common settings.	
<b>A.1.d</b>	Add, subtract, multiply polynomials, including multiplying two binomials, or divide factorable polynomials.	
<b>A.1.e</b>	Evaluate polynomial expressions by substituting integers for unknown quantities.	
<b>A.1.f</b>	Factor polynomial expressions.	
<b>A.1.g</b>	Write polynomial expressions as part of word-to-symbol translations or to represent common settings.	
<b>A.1.h</b>	Add, subtract, multiply and divide rational expressions.	
<b>A.1.i</b>	Evaluate rational expressions by substituting integers for unknown quantities.	
<b>A.1.j</b>	Write rational expressions as part of word-to-symbol translations or to represent common settings.	
<b>A.2.a</b>	Solve one-variable linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms or equations with coefficients represented by letters.	
<b>A.2.b</b>	Solve real-world problems involving linear equations.	
<b>A.2.c</b>	Write one-variable and multi-variable linear equations to represent context.	
<b>A.2.d</b>	Solve a system of two simultaneous linear equations by graphing, substitution, or linear combination. Solve real-world problems leading to a system of linear equations.	
<b>A.3.a</b>	Solve linear inequalities in one variable with rational number coefficients.	
<b>A.3.b</b>	Identify or graph the solution to a one variable linear inequality on a number line.	
<b>A.3.c</b>	Solve real-world problems involving inequalities.	
<b>A.3.d</b>	Write linear inequalities in one variable to represent context.	
<b>A.4.a</b>	Solve quadratic equations in one variable with rational coefficients and real solutions, using appropriate methods. (e.g., quadratic formula, completing the square, factoring, inspection)	
<b>A.4.b</b>	Write one-variable quadratic equations to represent context.	

<b>RC4: Algebraic problem solving with graphs and functions</b>		<b>25%</b>
<b>A.5.a</b>	Locate points in the coordinate plane.	
<b>A.5.b</b>	Determine the slope of a line from a graph, equation, or table.	
<b>A.5.c</b>	Interpret unit rate as the slope in a proportional relationship.	
<b>A.5.d</b>	Graph two-variable linear equations.	
<b>A.5.e</b>	For a function that models a linear or nonlinear relationship between two quantities, interpret key features of graphs and tables in terms of quantities, and sketch graphs showing key features of graphs and tables in terms of quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior, and periodicity.	
<b>A.6.a</b>	Write the equation of a line with a given slope through a given point.	
<b>A.6.b</b>	Write the equation of a line passing through two given distinct points.	
<b>A.6.c</b>	Use slope to identify parallel and perpendicular lines and to solve geometric problems.	
<b>A.7.a</b>	Compare two different proportional relationships represented in different ways. Examples include but are not limited to: compare a distance-time graph to a distance-time equation to determine which of two moving objects has a greater speed.	
<b>A.7.b</b>	Represent or identify a function in a table or graph as having exactly one output (one element in the range) for each input (each element in the domain).	
<b>A.7.c</b>	Evaluate linear and quadratic functions for values in their domain when represented using function notation.	
<b>A.7.d</b>	Compare properties of two linear or quadratic functions each represented in a different way (algebraically, numerically in tables, graphically or by verbal descriptions). Examples include but are not limited to: given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	

# Appendix C

## Science Reporting Categories

The following table illustrates which Science indicators support each reporting category.



<b>Reporting Category 1: Analyzing scientific and technical arguments, evidence and text-based information</b>		<b>30%</b>
<b>SP.1.a</b>	Understand and explain a textual scientific presentations	
<b>SP.1.b</b>	Determine the meaning of symbols, terms and phrases as they are used in scientific presentations	
<b>SP.3.a</b>	Cite specific textual evidence to support a finding or conclusion	
<b>SP.5.a</b>	Reconcile multiple findings, conclusions or theories.	
<b>SP.6.c</b>	Express scientific information or findings verbally	
<b>Reporting Category 2: Applying scientific processes and procedural concepts</b>		<b>40%</b>
<b>SP.2.a</b>	Identify possible sources of error and alter the design of an investigation to ameliorate that error	
<b>SP.2.b</b>	Identify and refine hypotheses for scientific investigations	
<b>SP.2.c</b>	Identify the strength and weaknesses of one or more scientific investigation (i.e. experimental or observational) designs	
<b>SP.2.d</b>	Design a scientific investigation	
<b>SP.2.e</b>	Identify and interpret independent and dependent variables in scientific investigations	
<b>SP.3.b</b>	Reason from data or evidence to a conclusion	
<b>SP.3.c</b>	Make a prediction based upon data or evidence	
<b>SP.4.a</b>	Evaluate whether a conclusion or theory is supported or challenged by particular data or evidence	
<b>SP.7.a</b>	Understand and apply scientific models, theories and processes	
<b>Reporting Category 3: Reasoning quantitatively and interpreting data in scientific contexts</b>		<b>30%</b>
<b>SP.1.c</b>	Understand and explain a non-textual scientific presentations	
<b>SP.3.d</b>	Using sampling techniques to answer scientific questions	
<b>SP.6.a</b>	Express scientific information or findings visually	
<b>SP.6.b</b>	Express scientific information or findings numerically	
<b>SP.7.b</b>	Apply formulas from scientific theories	
<b>SP.8.a</b>	Describe a data set statistically	
<b>SP.8.b</b>	Use counting and permutations to solve scientific problems	
<b>SP.8.c</b>	Determine the probability of events	

# Appendix D

## Social Studies Reporting Categories

The following table illustrates which Social Studies indicators support each reporting category.



<b>Reporting Category 1: Analyzing and creating text features in a social studies context</b>		<b>30%</b>
<b>SSP.1.a</b>	Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence.	
<b>SSP.2.a</b>	Determine the central ideas or information of a primary or secondary source document, corroborating or challenging conclusions with evidence.	
<b>SSP.4.a</b>	Determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies.	
<b>SSP.5.a</b>	Identify aspects of a historical document that reveal an author’s point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).	
<b>SSP.7.a</b>	Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document.	
<b>SSP.7.b</b>	Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.	
<b>SSP.8.a</b>	Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.	
<b>SSP.9.b</b>	Produce writing that introduces the idea(s) or claim(s) clearly; creates an organization that logically sequences information; and maintains a coherent focus.	
<b>SSP.9.c</b>	Write clearly and demonstrate sufficient command of standard English conventions.	
<b>Reporting Category 2: Applying social studies concepts to the analysis and construction of arguments</b>		<b>40%</b>
<b>SSP.1.b</b>	Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.	
<b>SSP.2.b</b>	Describe people, places, environments, processes, and events, and the connections between and among them.	
<b>SSP.3.a</b>	Identify the chronological structure of a historical narrative and sequence steps in a process.	
<b>SSP.3.b</b>	Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.	
<b>SSP.3.c</b>	Analyze cause-and-effect relationships and multiple causation, including the importance of natural and societal processes, the individual, and the influence of ideas.	
<b>SSP.3.d</b>	Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.	
<b>SSP.5.b</b>	Identify instances of bias or propagandizing.	
<b>SSP.5.c</b>	Analyze how a historical context shapes an author’s point of view.	
<b>SSP.5.d</b>	Evaluate the credibility of an author in historical and contemporary political discourse.	
<b>SSP.9.a</b>	Produce writing that develops the idea(s), claim(s) and/or argument(s) thoroughly and logically, with well-chosen examples, facts, or details from primary and secondary source documents.	

<b>Reporting Category 3: Reasoning quantitatively and interpreting data in social studies contexts</b>		<b>30%</b>
<b>SSP.6.a</b>	Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	
<b>SSP.6.b</b>	Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, political cartoons.	
<b>SSP.6.c</b>	Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words.	
<b>SSP.10.a</b>	Interpret, use, and create graphs (e.g., scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g., do not extend trend beyond a reasonable limit).	
<b>SSP.10.b</b>	Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related.	
<b>SSP.10.c</b>	Distinguish between correlation and causation.	
<b>SSP.11.a</b>	Calculate the mean, median, mode, and range of a dataset.	