

Module: Mathematics

Lesson Title: It's a Bargain!

Standards for the Lesson

Florida Adult Basic Education Mathematics Standards
Perform operations with multi-digit whole numbers and with decimals to hundredths. (CCR.MA.ABE.1.3.4)
Find a percent of a quantity as a rate per 100, such as, 30% of a quantity is 30/100 times that quantity. (CCR.MA.ABE.8.4.1.a)

Interpreting the Standard

1 Standards	2 Skills Included in the Standard	3 Concepts Included in the Standard	4 Through a Particular Context	5 Cognitive Demand/Levels of Thinking	6 Sample Activity
Perform operations with multi-digit whole numbers and with decimals to hundredths. (CCR.MA.ABE.1.3.4)	perform	operations with whole numbers and decimals to hundredths	Use of real-world materials, such as newspapers, advertisements, etc.	DOK 1	Have students determine the best buy using advertisements in newspapers.
Find a percent of a quantity as a rate per 100, such as, 30% of a quantity is 30/100 times that quantity. (CCR.MA.ABE.8.4.1.a)	find	percents		DOK 1	Have students use coupons to determine savings on items.

Objectives of the Lesson

Students will:

- Use newspaper advertisements to determine savings on a list of items
- Apply addition, subtraction, multiplication, and division to real-world problems
- Determine percent saved on items

Materials

- **Handout A: Math Scavenger Hunt**
- **Handout B: It's All in the Ads**
- **Handout C: Saving Savvy, Grocery Shopping Worksheet**
- Local newspapers, grocery store advertisements, and coupon handouts
- Scissors and glue sticks

Instructional Plan

Overview

Students learn best when they are motivated and when the topics they study are interesting and relevant to their lives. This lesson is designed to help students improve their problem-solving ability using the newspaper as an essential tool in the process. Students will practice basic skills in addition, subtraction, multiplication, division, and finding percents.

Process

Ask students the following question:

What does the newspaper have to do with math?

Students should respond that the newspaper is filled with numbers from housing costs to advertisements from local home improvement centers and the grocery store.

Share with students that in today's lesson, they will use the newspaper to help improve their skills at using percentages and how to become a more savvy shopper.

Begin the lesson by having students conduct a math scavenger hunt. Provide each student with a copy of **Handout A: Math Scavenger Hunt**, a pair of scissors, glue stick, and a complete copy of the local newspaper. You may wish to use the daily edition that includes all of the advertisements and coupon inserts.

Explain that the students are about to go on a scavenger hunt that will draw on their ability to skim and scan the newspaper looking for specific information. Tell them that they have a list of 14 items they need to find in the newspaper. When they find one, they must cut out the item and any necessary information and paste it next to the description and note the page number where the item was found.

The first student to find all of the items wins. Debrief the activity by discussing the items that were the most difficult to find.

Before beginning the next activity, ask students if they ever use the advertisements in the paper. Why or why not? Have students spend time discussing how they use advertisements.

Divide the students into groups of 3 or 4. Give each group a pair of scissors, glue stick, and advertisements from the local newspaper that focus on saving money.

Have the students work together to find 4 or 5 advertisements that encourage savings. Have them cut out each advertisement and then answer the questions on **Handout B: It's All in the Ads**.

Have students discuss which advertisement they considered to be the most and least effective.

Write the word: *coupon* on the board. Give students 2 minutes to write down as many words or phrases that come to mind when they think of the word *coupon*. Explain that coupons can often save money when shopping. Share with students that they are going to participate in a contest to see who is the most Savvy Saver. In this activity students need to make a list of 10 products that they want to purchase from the grocery store. They must then search through the advertisements to see how much money they can save on those products. The student with the highest level of savings earns the title of Savvy Saver.

Provide each student with a copy of **Handout C: Grocery Shopping Worksheet**. Show students how to chart the following information: product and brand, product cost, coupon face value, and final cost, as well as how to total the different costs. Share with students that they will use their addition, subtraction, multiplication, and division skills to complete the chart. Assist students as needed. Make sure that students have access to grocery store ads and coupon pages before they begin the activity.

Debrief the activity by having students share their shopping list and savings with the rest of the class. See who the best Savvy Saver is.

Sample Debriefing Questions

- What is one thing that you learned from this activity?
- How else do you use math skills when you shop?
- Are Buy One, Get One Free (BOGO) purchases a better bargain than using coupons? Why or why not?
- How do you use math in your daily life?

Modifications for Different Levels

This lesson can be used with all levels of math students. Modify the activity for lower level students by having them select fewer items and only determine the amount that they saved by using coupons. You may wish to provide calculators to assist students in calculating basic operations.

For higher-level math students, have them determine the percentage saved for each item, e.g., I saved 25% percent on a \$2.00 item with a coupon of \$.50.

Handout A: Math Scavenger Hunt

Clip out the number and necessary accompanying information and paste it next to the description.

1. A percentage that is more than one-fifth ($1/5$).
2. A store giving more than one-fourth ($1/4$) off of an item.
3. An ad larger than one-half ($1/2$) the page.
4. An ad that is less than one-fourth ($1/4$) the page.
5. A stock that has gained seven-eighths ($7/8$) of a point.
6. A dollar amount greater than one million.
7. A percentage higher than .75.
8. A date one week from today.
9. Decimal that does not refer to money.
10. Temperature.
11. Roman numeral.
12. Graphic with the number 0.
13. Equation using numbers.
14. A coupon that saves the consumer more than one dollar (\$1.00).

Handout B: It's All in the Ads

Select newspaper advertisements that encourage saving. Paste the advertisements on this page and then answer the following questions about each advertisement.

What types of math are used by each advertisement to persuade you to purchase a product?

Which advertisement uses the “most effective” ideas to sell a product? Why?

Which advertisement uses the “least effective” ideas to sell a product? Why?

Handout C: Grocery Shopping Worksheet

PRODUCT AND BRAND	PRODUCT COST	COUPON FACE VALUE	FINAL COST
1. _____	\$ _____	\$ _____	\$ _____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
TOTAL	\$ _____	\$ _____	\$ _____
ORIGINAL GROCERY BILL	\$ _____	GROCERY BILL WITH COUPON SAVINGS	\$ _____
AMOUNT SAVED	\$ _____	PERCENT SAVED	_____ %