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CLASSROOM STRATEGIES FOR SOLVING MATH PROBLEMS

1. Make sure that the student's inability to read is not the case of his/her difficulty in solving math word problems.
2. Have the student read the math word problem first silently, then aloud and identify the mathematical operation required.
3. Provide word problems that require a one-step process, making certain that the sentences are short and concise.
4. Teach the student to look for "clue" or "key" words in word problems that indicate the mathematical operations.
5. Have the student orally analyze the steps that are required to solve word problems {e.g., "What is given?" "What is asked?" "What operation(s) is used?" etc.}.
6. Represent the numerical amounts, in concrete forms.
7. Have the student write a number sentence after reading a math word problem.
8. Have the student create word problems for number sentences.
9. Have the student restate math word problems in his/her own words.
10. Ask the student to identify the primary question that must be answered to solve a given word problem. Continue this activity using more difficult word problems containing two or more questions. Make sure the student understands that questions are often implied rather than directly asked.
11. Have the student make up word problems. Other students in the classroom would then solve these problems.
12. Supplement textbook problems with teacher-made problems. These problems can deal with classroom experiences. Include students' names in the word problems to make them more realistic and meaningful to the student.
13. Use word problems that are of interest to the student and related to his/her experiences.
14. Make certain the student reads through the entire word problem before attempting to solve it.
15. Teach the student to break down each math word problem into specific steps.
16. Have the student solve math word problems by manipulating objects.
17. Help the student recognize common patterns in math word problems.
18. Discuss and provide the student with a list of words/phrases which usually indicates an addition operation - together, altogether, sum, in all, both, gained, received, total, won, saved, etc.
19. Discuss words/phrases which usually indicate a subtraction operation - difference, between, from, left, how many (more, less), how much (taller, farther, heavier), withdrawal, spend, lost, remain, more, etc.

20. Discuss words/phrases which usually indicate a multiplication operation - area, each, times, product, triple, twice, etc.
21. Discuss words/phrases that usually indicate a division operation - into, share, each, average, monthly, daily, weekly, yearly, half as many, quotient, etc.
22. Teach the student to convert words into their numerical equivalents to solve word problems - two weeks = 14 days, one year = 12 months, one quarter = 25 pennies, etc.
23. Teach the student relevant vocabulary often found in math word problems - dozen, amount, triple, twice, etc.
24. Allow the student to use a calculator when solving problems.
25. Require the student to read math word problems at least twice before beginning to solve the problem.
26. Before introducing complete word problems present the student with phrases to be translated into numbers - six less than ten equals, 10 - 6 = , etc.
27. Assign a peer to act as a model for the student and to demonstrate for the student how to solve math word problems.
28. Reduce the number of problems assigned to the student at one time.
29. Demonstrate for the student how to solve math word problems by reading the problem and then solving the problem on paper step-by-step.
30. Correlate word problems with computation procedures just learned in the classroom.
31. Teach the student the meaning of mathematical terms - sum, dividend, quotient, product, etc.
32. Highlight or underline key words in math problems.
33. Provide the student with a checklist to follow in solving math word problems: what information is given, what question is asked, what operation (s) is used.
34. Make sure the student has a number line on his/her desk to use as a reference.
35. Develop a math reference sheet for the student to keep at his/her desk outlining the steps used in various processes.
36. Have the student check his/her word problems using a calculator.
37. Recognize quality work - display it and congratulate the student for their accomplishments.
38. Make certain the student is not required to learn more information than he/she is capable of at any one time.
39. Have the student act as a peer tutor to teach a peer a math concept that the student has mastered. This can serve as reinforcement for the student.
40. Provide practice in solving math word problems by using a computer software program that gives the student immediate feedback.
41. Make certain the student has mastery of math concepts at each level before introducing a new skill level.

42. Have the student manipulate objects - apples, oranges, toys, cars, etc. as the teacher describes the operation.
43. Reinforce the student for solving math word problems correctly.
44. When writing math problems, have the student use graph paper to keep the numbers lined up in straight columns so that one number is in one box.
45. Have the student turn lined notebook paper to the side, so that they can line up their numbers in the proper columns.