

Strategies to assist in Math Reasoning:

- 1 . Have the student visualize abstract concepts by using graphs, charts, objects, etc.
- 2 . Teach key words to the student that implies a mathematical operation (e.g. combine, plus, total, gets more, together, altogether, sum, in all, gained, and "and" all imply addition).
- 3 . Encourage the student to write down key parts of word problems on paper rather than try to recall them. Have him/her write down the number sentence that corresponds to a word problem.
- 4 . As much as possible, relate math problems to real world experiences such as shopping, averaging grades, cooking, etc.
- 5 . Have the student restate word problems in his/her own words before attempting to solve them.
- 6 . Have the student make up word problems that correspond to arithmetic problems that he/she has already correctly solved.
- 7 . Make certain that the student understands the meanings of words that establish relationships between objects such as "greater", "larger", "faster", "longer", etc.
- 8 . Memorizing equivalents may help the student with math reasoning (e.g. 60 seconds = a minute, 60 minutes = a hour, 24 hours = a day, etc.)
- 9 . Teach the numeric equivalents of words such as single = one, a couple = 2, dozen = 12, few = 3 or more, triple = three times, etc.
- 10 Encourage the student to use a calculator while solving word problems.
- 11 Develop and allow the student to refer to a list of vocabulary words associated with math concepts.
- 12 Highlight in word problems the key word(s) that imply the math operation involved.
- 13 Have the student read the math word problem several times before attempting to solve it.
- 14 Make sure that written problems use language familiar to the student (see assessment for estimated reading grade level).
- 15 Before the student attempts to solve the word problem, have them estimate or give a "reasonable guess" as to what the answer will be. Then, have them compare their final answer to their estimate.
- 16 During multiple choice tests, encourage the student to completely work out each word problem rather than "guess" at an item. If their answer does not match one of the choices, they should re-work the problem.