

5.6 Solving Word Problems in Science and Mathematics

Solving word problems in mathematics or science can be a very complex task because

- mathematics and reading are combined;
 - words may be used instead of numbers (e.g. half, dozen);
 - the actual mathematical operation may not be obvious;
- and
- several mathematical operations may be required.

Furthermore, assuming that the word problem is correctly transcribed into mathematical language, the student still has to carefully calculate the correct answer to achieve full marks. Solving word problems involves a variety of thinking skills, but many students with (and without) special educational needs lack basic strategies for working out word problems.

How to solve word problems

1. Read the entire problem slowly.
2. Underline all numbers with a pencil or highlighter including numbers written as words (e.g. half, dozen).
3. Read the whole problem again and try to draw a diagram or picture that may help you to solve the problem.
4. Read the problem for the third time and try to identify what the problem is asking for.
5. Determine what steps you need to calculate the answer (e.g. addition, multiplication).
6. Estimate or guess what the answer might be.
7. Calculate the answer by writing down each step and check your answer to make sure that it makes sense.