

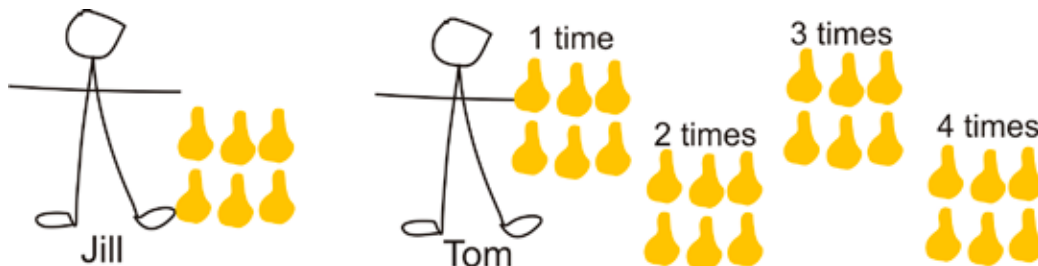
Understanding Multiplication & Division

Math word problems can be a real bear, especially for children who struggle with reading comprehension or for those learning to speak English as a second language. The good news is that there are a few strategies for helping to take the drudgery out of word problems. One is to help children develop the habit of visualizing, another is to group problems by type and identify words that are likely to be used in the problem, and the third is to help children learn to sketch out what is happening in the word problem.

“Times” and “each has” Problems: Understanding Multiplication

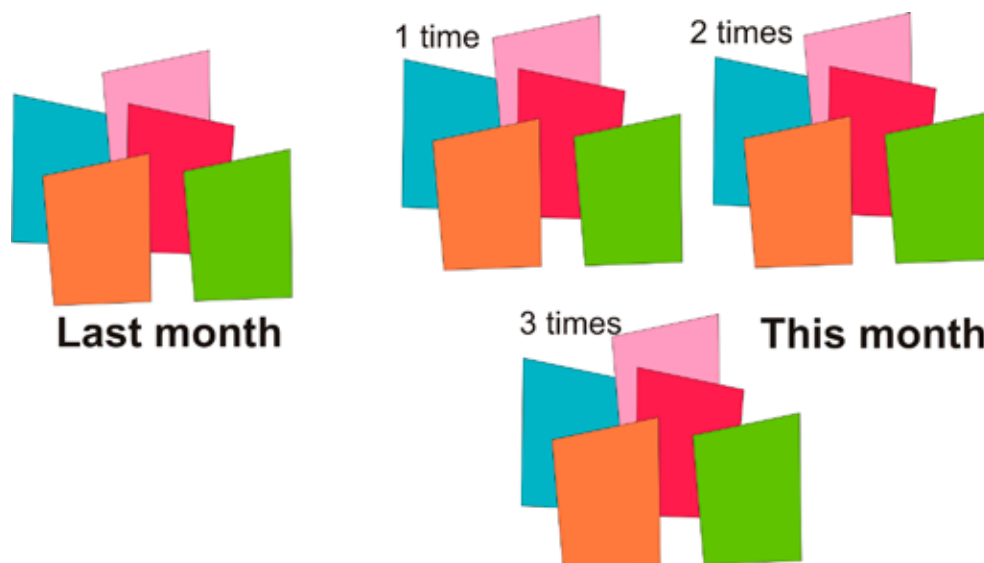
“I see 3 cats outside, and each has four legs. How many legs are there in all?”

“Jill picked 6 pears. Tom picked 4 times as many as Jill picked. How many pears did Tom pick?”



“Mom baked cookies. She put the cookies into 5 little boxes. Each has 4 cookies in it. How many cookies are there in all?”

“Last month Bev read 5 books. This month she read 3 times as many books. How many books did she read this month?”



There are two types of multiplication problems here. One is “how many are there in all?” and the other has to do with a number times. In both cases, drawing a sketch is going to be helpful. Of course have the students close their eyes and “see” the problem as you read it aloud, one detail at a time.

Here are some other problems to practice with:

“I saw 10 bikes in front of the school. Each had two wheels. How many wheels were there in all?”

“Last week Harry earned \$2.00 doing chores. This week he earned 3 times that much raking leaves. How much money did he earn this week?”

“Sharing” Problems: Understanding Division

Sharing problems use phrases like “You want to share equally with...” and “How many did each get?” Here are some examples of those problems:

“Suzanna has 12 apples and wants to share them equally with her 3 friends. How many apples will each get?”



“Four people are sharing 48 pennies. How many pennies will each person get?”

“Five children buy 45 pieces of candy to share. How many pieces of candy will each child get?”

“I have six dog cookies, and I have 2 dogs. I want to be fair and give each dog the same number of cookies. How many cookies will each dog get?”

“John paid 35 cents for 5 candies. How much did each candy cost?”

Encourage your students to draw simple sketches to help them understand what is going on. Visualization will also greatly help in deciding what to do to solve the problem. Have the children close their eyes and make pictures in their minds of what you are saying.

For example, you might say “Four people” and the students will see four people in their minds. When you continue, saying, “are sharing 48 pennies,” have them imagine a pile of pennies on a table. Sharing means each person will get some, so at this point, ask the children how they would go about sharing the pennies equally and fairly among the 4 people.

An alternative to drawing is to supply little plastic bowls and pebbles for the children to use in acting out their sharing problem. Another option is to provide a large piece of paper on which the children can draw the correct number of circles to represent each person who is receiving an equal share, and then to draw little circles to represent the objects shared.