**Examples of different CGI problem types:**

**Example Set 1--part-part-whole:**
There were 12 boys and 14 girls in Mrs. Maxwell's class. How many students were there in
all?

There were 26 students in Mrs. Maxwell's class. Fourteen of them were girls. How many were
boys?

This is a part-part-whole problem because there was no change happening in the story, but the whole number is broken down into 2 parts.

**Example Set  2--Separate:**
Mrs. Maxwell had 20 boxes of tissues. The students used 15 boxes. How many boxes does she have  left?

Mrs. Maxwell had 25 boxes of tissues. The students used some. Now she has 15 boxes. How many did the students use?

Mrs. Maxwell had some boxes of tissues. The students used 10 boxes. Now she had 15 left. How many did she have in the beginning?

These are called a "separate" problem because the action involves separating some
items from the total. Although this problem would have traditionally been called  a subtraction problem, we refer to it as a separate problem because the problem might not be solved using subtraction.

**Example Set 3--join:**

Mrs Maxwell had 8 pencils. Mr. Lord gave her 10 more pencils. How many pencils does she have now?

Mrs. Maxwell had 8 pencils. Mr. Lord gave her some more. Now she has 18 pencils. How many did Mr. Lord give her?

Mrs. Maxwell had some pencils. Mr. Lord gave her 10 more pencils. Now she has 18 pencils. How many pencils did she have in the beginning?

These are called "join" problems. We use the term join rather than addition because although the story is about putting two groups together, addition might not be the most efficient strategy to use to solve the problems.

**Example Set  4--compare:**
Mrs Maxwell has 22 students in her class. Mrs. Leeper has 19 student in her class. How many more does Mrs. Maxwell have?

Mrs. Maxwell has 22 students in her class. Mrs. Leeper has 3 fewer students than Mrs. Maxwell. How many students does Mrs. Leeper have?

Mrs. Maxwell has 3 more students than Mrs. Leeper. Mrs. Leeper has 19 students. How many does Mrs. Maxwell have?

These are comparison problems. These are usually difficult for first graders.

**Example Set 5--multiplication and division:**
There are 5 first grade teachers. Mr. Lord gave them each 4 computers. How many computers do they have all together?

Mr. Lord bought 20 computers for first grade teachers to share. If each teacher got 4 computers, how many first grade teachers are there?

There are 5 first grade teachers. Mr. Lord bought 20 computers for them to share. How many computers will each teacher get?\*

\*This is the most difficult problem type for first graders because they often are not familiar
with the procedure of "dealing" out items. Try to play games with your child that will help them develop this important concept!

These problems are multiplication/division problems. At the first grade level, students are not
familiar with the symbols for these concepts, but they are able to solve these problems with pictures or manipulatives or by repeated adding or subtracting.