## Family Support Materials

## Addition and Subtraction Story Problems

In this unit, students solve new types of story problems within 10. They develop an understanding of the meaning of the equal sign and connect story problems to equations.

## Section A: Add To/Take From Story Problems

In this section, students revisit familiar story problem types. Students work formally with equations for the first time. They write equations such as $2+7=9$ and learn to draw a box around the answer to the question in the story problem. Students work with problems where they have to figure out how much is being added:

Diego had 7 pencils. His sister gave him some pencils.

Now, Diego has 9 pencils.
How many pencils did Diego's sister give him?

Students see that these problems can be solved by either addition or subtraction. They can solve this problem by counting on from 7 to 9 and write the equation $7+2=9$. Students can also solve this problem by taking away 7 from 9, and write the equation $9-7=2$.

## Section B: Put Together/Take Apart Problems

In this section, students solve problems where two groups are put together. In some problems they find the total, and in other problems the total is given and they find the missing group. Students solve problems in the context of Shake and Spill, a game that uses two-color counters.

Counters are put into a cup and spilled out. Students make observations about what they see or different combinations that might occur.

Tyler is playing Shake and Spill. During his first round he spilled these counters.


Write 2 equations to represent his counters.
Show other combinations of red and yellow counters that Tyler could spill.

With this type of problem, students can look at different kinds of equations, such as those with the total before the equal sign $(7=4+3)$.

## Section C: Compare Story Problems

In this section, students solve story problems where they find "how many more" or "how many fewer" one group has than another group, such as:

There are 8 glue sticks and 3 scissors at the art station.
How many fewer scissors are there than glue sticks?

Students think about the relationship between addition and subtraction. They start by considering how many they need to add to make two towers the same length. For example:

How many more cubes does Clare have than Andre?


For this type of problem, students may count the extra cubes in Clare's tower to find the answer. They may start at 3 and count up to 10 or start at 10 and count back to 3 . Students analyze both addition $(3+7=10)$ and subtraction ( $10-3=7$ ) equations.

## Section D: All Kinds of Story Problems

This section brings the work of the unit together as students solve a variety of problem types and make sense of equations with a symbol for the unknown, such as $10=\square+6$.

## Try it at home!

Near the end of the unit, ask your student to solve the following word problems:

1. Clare has 8 pencils. Andre has 10 pencils. How many more pencils does Andre have?
2. Diego had 6 pens. His mother gave him some pens. Now he has 9 pens. How many pens did Diego's mother give him?

Questions that may be helpful as they work:

- How could you draw the problem?
- How can you count on or take away to find the answer?
- What equation can you write to represent this problem?

