KEY CONCEPT OVERVIEW

During the next week, our math class will solve word problems involving numbers up to 20. We will use the RDW process and tape diagrams to model and solve word problems. In class, we will share strategies for drawing a tape diagram when a part is unknown.

You can expect to see homework that asks your child to do the following:
- Use a tape diagram to model word problems with an unknown total or part.
- Use addition or subtraction to solve word problems.
- Create a word problem to match a given tape diagram.

SAMPLE PROBLEM (From Lesson 21)

Peyton lined up 12 centimeter cubes along the edge of her book to measure its length. That wasn’t enough, so she added more cubes. If her book is 16 centimeters long, how many cubes did Peyton have to add?

\[
12 + ? = 16 \\
16 - 12 = ?
\]

\[
12 + 4 = 16 \\
16 - 12 = 4
\]

*Peyton added 4 centimeter cubes.*

Additional sample problems with detailed answer steps are found in the Eureka Math Homework Helpers books. Learn more at GreatMinds.org.
**HOW YOU CAN HELP AT HOME**

- Encourage your child to visualize story problems. Ask, “What can you draw to represent this story? What can you tell by looking at your drawing?” If needed, invite your child to act out the story by using simple objects such as action figures or pennies.

- Read challenging story problems aloud to your child. Doing so allows your child to concentrate on visualizing the story content without focusing on the demands of reading the text.

- Look for and share real-world situations as story problems. For instance, when shopping in the grocery store, you might say, “We are buying 12 apples. I see that 4 are green and the rest are red. How many red apples are we buying?”

**MODELS**

**Tape Diagram:** A problem-solving model that helps students see the relationships between quantities. The example below represents the following problem: 9 dogs were playing at the park. More dogs came to the park. Then there were 11 dogs. How many more dogs came to the park?

```
<table>
<thead>
<tr>
<th>Total dogs</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th></th>
<th>9 playing</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ ] [ ] [ ] [ ]</td>
<td>[ ] [ ]</td>
</tr>
</tbody>
</table>
```

9 + ? = 11

Two more dogs came to the park.