

KEY CONCEPT OVERVIEW

During the next few days, our math class will be reviewing and building upon familiar skills established in Grades K and 1. We will be working toward the Grade 2 goal of fluently adding and subtracting numbers up to 100.

You can expect to see homework that asks your child to do the following:

- Use a **number bond** to show a total and two **parts** for numbers 6–10. For example, if 9 is the total and 7 is one part, then 2 is the other part.
- Recall **partners to ten** (e.g., 1 and 9, 2 and 8, 3 and 7).
- Recall **ten plus facts** (e.g., $10 + 3 = 13$; $10 + 7 = 17$).
- Add single-digit numbers to a multiple of ten to reach a given total; for example, $80 + \underline{\quad} = 82$.

SAMPLE PROBLEM *(From Lesson 1)*

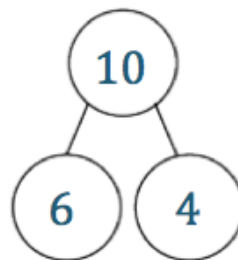
Add or subtract. Then complete the number bond to match.

10 = 4 + 6

10 = 6 + 4

10 - 6 = 4

10 - 4 = 6



HOW YOU CAN HELP AT HOME

- If your child would benefit from using concrete objects for support, provide pennies (or other counters) to help him break apart numbers into two parts. The use of fingers is also encouraged!
- Encourage your child to explain how she knows the correct answer. For example, “I know that $10 - 7 = 3$, so that means $10 - 3 = 7$. Three and seven are parts and 10 is the total.”
- Practice counting the **Say Ten** way. Say a two-digit number (e.g., 23 or 37), and ask your child to repeat it the Say Ten way (2 tens 3; 3 tens 7). For fun, invite your child to say some numbers for you to repeat the Say Ten way.

TERMS

Say Ten counting: An East Asian method of counting that reinforces place value understanding by asking students to break two-digit numbers into tens and ones. In Grade 2, Say Ten counting extends to numbers in the hundreds. For example, 573 becomes “5 hundreds 7 tens 3.”

eighteen	1 ten 8
forty-eight	4 tens 8
six hundred thirty-eight	6 hundreds 3 tens 8

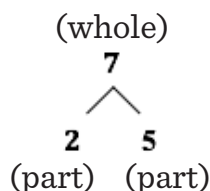
Part: One of two (or more) numbers that add up to a given total. For example, in $3 + 5 = 8$, the parts are 3 and 5.

Partners to ten: Pairs of numbers that add up to ten: 1 and 9, 2 and 8, 3 and 7, and so on.

Ten plus facts: Ten plus ____ one(s) makes a teen number (11–19); for example, $10 + 1 = 11$, $10 + 2 = 12$, and so on.

MODELS

Number Bond: A model that shows the relationship between a number (whole) and its parts.



KEY CONCEPT OVERVIEW

During the next two weeks, our math class will be adding and subtracting numbers to 100, building upon Grade 1 skills at a quickened pace, and using strategies to make problems easier.

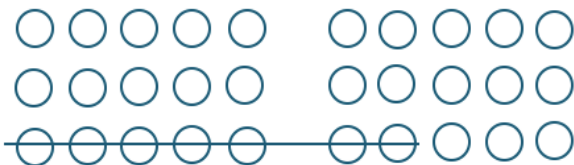
You can expect to see homework that asks your child to do the following:

- Add and subtract like units. (e.g., in $73 - 21$, 7 tens – 2 tens = 5 tens, and 3 ones – 1 one = 2 ones.)
- Use a **number bond** to **make a ten** when adding numbers up to 100; for example, $38 + 7$ can be thought of as $38 + 2 + 5$, and from there, we can make the simpler problem, $40 + 5$.
- Use a number bond to **take from ten** when subtracting numbers up to 100; for example, $67 - 9$ can be thought of as $57 + 10 - 9$, and from there, we can make the simpler problem, $57 + 1$.

SAMPLE PROBLEM (From Lesson 4, 5, 7, 8)

Mary buys 30 stickers. She uses 7 stickers. How many stickers does Mary have left?

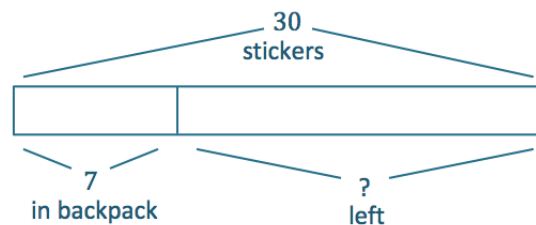
Solution 1:



$$\begin{array}{r} 30 - 7 = \boxed{23} \\ \swarrow \searrow \\ 20 \quad 10 \end{array} \quad \begin{array}{l} 10 - 7 = 3 \\ 20 + 3 = 23 \end{array}$$

$$30 - 7 = \underline{23}$$

Solution 2:



$$7 + \underline{23} = 30$$

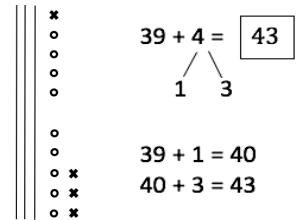
Mary has 23 stickers left.

HOW YOU CAN HELP AT HOME

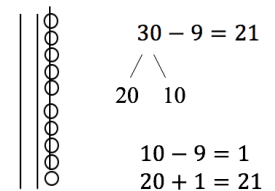
- Encourage your child to explain one strategy he can use to solve a problem. For example, “I know that $61 + 20 = 81$ because 20 is two tens. I started with 61 and I counted on two tens: 61, 71, 81.”
- Play “Make the Next Ten”: Partner A calls out a number (e.g., 28). Partner B tells how many ones are needed to make the next ten, and then says the number sentence ($2; 28 + 2 = 30$).
- Play “Take out a Ten”: Partner A calls out a number (e.g., 67). Partner B takes out a ten, states the remaining part (57), and provides a related number sentence ($67 - 10 = 57$, or $57 + 10 = 67$).

TERMS

Make a ten: An addition strategy used to make a unit of ten. For example, $39 + 4$ can be thought of as $39 + 1 + 3$, and from there, we can make the simpler problem, $40 + 3$.



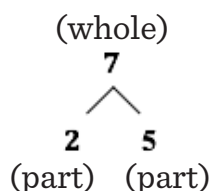
Take from ten: A strategy used to subtract from a unit of ten. For example, $30 - 9$ can be thought of as $20 + 10 - 9$, and from there, we can make the simpler problem, $20 + 1$.



RDW process: A 3-step problem-solving method that requires students to 1) **R**ead the problem, 2) **D**raw a picture, and 3) **W**rite an equation and statement of the answer. Students may draw a tape diagram as part of Step 2. (See Sample Problem and Solution 2 above.)

MODELS

Number Bond: A model that shows the relationship between a number (whole) and its parts.



Quick Tens and Ones: A math drawing used to represent tens and ones. A vertical line represents each ten; dots represent ones. For example, $27 = 2$ tens 7 ones.

