

KEY CONCEPT OVERVIEW

During the next week, our math class will learn about numbers up to 40. Building on our work with **making a ten** and some ones with numbers 11 through 19, we will now explore numbers comprised of multiple tens and ones (e.g., 27, 33, 37). We will use linking cubes, our fingers, and dimes and pennies to represent numbers up to 40 in many ways—from all ones to tens and ones. We will use a **place value chart** to organize units of tens and ones. Finally, students will use addition and subtraction to find 1 more, 1 less, 10 more, and 10 less than a given number.

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

- Use number bonds and place value charts to show tens and ones.
- Break apart two-digit numbers into tens and ones.
- Add tens and ones to make a two-digit number and write an addition sentence to match; for example, 3 tens 4 ones can be written as $30 + 4 = 34$.
- Draw **quick tens and ones** to show a number; then add or subtract 1 or 10. (See Sample Problem.)

SAMPLE PROBLEMS (From Lesson 5)

Draw quick tens and ones to show the number. Then draw 1 more or 10 more, or cross off to show 1 less or 10 less. Write your answer on the line.

1. 1 more than 34 is 35. 2. 10 more than 17 is 27. 3. 1 less than 32 is 31. 4. 10 less than 15 is 5.



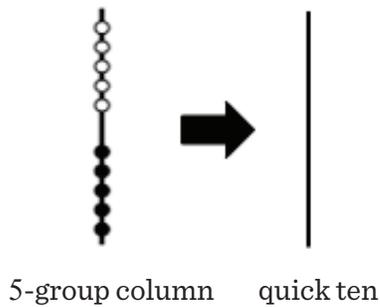
Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Play Break Apart Numbers. Set a timer for one minute. Have a race with your child to complete as many different number bonds for numbers 5 through 9 as possible. When the minute is up, say a matching number sentence for each bond you completed, for example, $1 + 4 = 5$, $5 = 3 + 2$, $5 = 5 + 0$, and $5 - 1 = 4$.
- Practice making ten with pennies and dimes. Help your child arrange ten pennies into 5-groups (two rows of five). Then count the pennies together (e.g., one cent, two cents, three cents) and say out loud, “Ten pennies is equal to one dime,” as you exchange the 10 pennies for 1 dime. Repeat the process of counting then exchanging 10 pennies for 1 dime until you have exchanged 40 cents.
- To reinforce place value, challenge your child to count from 0 to 120, alternating between the regular way and the Say Ten way (e.g., 8 tens 9, 90, 9 tens 1, 92, 9 tens 3, 94, 9 tens 5). If your child struggles, consider using a Rekenrek, if available, for visual support.

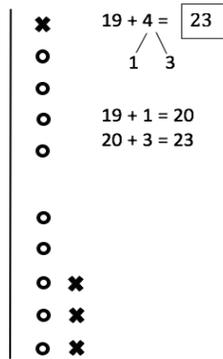
TERMS

A ten: A group, or unit, made up of 10 items. In the beginning of Grade 1, a ten is represented as a 5-group column. In Modules 4 through 6, a ten can be represented as a vertical line called a quick ten.



Place value: The value of a digit according to its placement in a number. For example, the 3 in 34 is in the tens place and has a value of 30 (3 tens).

Make a ten: A strategy used to make a unit of ten. For example, we can think of $19 + 4$ as $19 + 1 + 3$. From there, we can make the simpler problem $20 + 3$.



MODELS

Place Value Chart: A graphic organizer that provides a column for each unit in a number.

tens	ones
3	4

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



KEY CONCEPT OVERVIEW

During the next week, our math class will use the **comparison symbols** greater than ($>$), less than ($<$), and equal to ($=$) to compare quantities. Students will also compare numbers from left to right (from the tens place to the ones place). They will use place value understanding to recognize, for example, that 21 must be greater than 18 since 2 tens have a greater value than 1 ten 8 ones. Finally, students will hear the story of the alligator whose hungry mouth always opens toward the greater number.

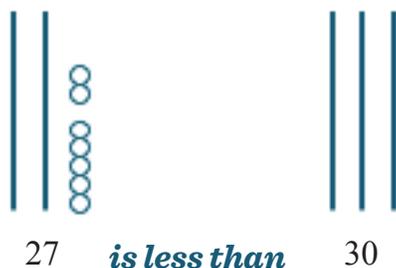
$$18 \begin{array}{c} \triangle \\ \triangle \\ \triangle \\ \triangle \\ \triangle \end{array} 21$$

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

- Compare two amounts and determine the greater and lesser of two numbers.
- Compare two amounts by reading numbers from left to right (from the tens place to the ones place).
- Use the symbols $>$, $<$, and $=$ to compare amounts and numbers.

SAMPLE PROBLEM (From Lesson 8)

Draw the numbers by using quick tens and ones. Compare the numbers by using phrases from the word bank to complete the sentence frame.



Word Bank

is greater than

is less than

is equal to

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

- Choose a number up to 40, and invite your child to add or subtract 10 or 1 to or from that number. For example, if you say, “39, subtract 10,” your child responds, “29.” You might also challenge your child to say the matching number sentence, for example, “ $39 - 10 = 29$.”
- If your child struggles with number comparison, consider using a Rekenrek, drawing a picture, or counting by tens and ones with dimes and pennies to provide visual support.
- Play Digit Detective with your child. Write a mystery number up to 40 on a piece of paper, then turn the paper over to hide the number. Use place value language to provide clues about the number. For example, you might say, “The digit in the tens place is 1 more than 2. The digit in the ones place is 1 less than 2. What’s the number?” (31)

TERMS

Comparison symbols: Symbols used to compare amounts, such as greater than ($>$), less than ($<$), and equal to ($=$).

KEY CONCEPT OVERVIEW

During the next couple of days, our math class will learn about adding and subtracting tens. First, we will use objects and number bonds to add and subtract tens. Students will see that just as $4 - 3 = 1$, $4 \text{ tens} - 3 \text{ tens} = 1 \text{ ten}$. Then we will add tens to numbers less than 40, for example, $18 + 20 = 38$. In doing so, we will notice that the number of ones (8 ones) does not change. Students will also use the **arrow way** to model addition and subtraction with tens. (See image at right.)



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

- Draw number bonds and quick tens to add and subtract tens.
- Draw number bonds and quick tens to add tens to a two-digit number, and then complete place value charts and number sentences.

SAMPLE PROBLEM (From Lesson 12)

Draw quick tens and ones to solve. Complete the place value chart, number bond, and number sentence to match.

tens	ones
1	6

+

tens	ones
2	0

	○○○○○ ○

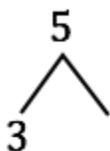
36					
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16	20				

<u>16</u>	+	<u>20</u>	=	<u>36</u>
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HOW YOU CAN HELP AT HOME

- With your child, practice adding and subtracting tens up to 40. You say an addition or subtraction expression with tens, up to 40 (e.g., $10 + 30$). Your child says the answer. (40) If your child is comfortable with this skill, consider adding and subtracting tens and ones (e.g., $20 + 3$, $3 + 30$, or $20 + 13$). Alternate roles to allow your child to lead in creating expressions.
- Challenge your child to count by tens with coins. Gather ten dimes and six pennies. Lay some of the dimes on a table, adding or removing dimes as you direct your child to count forward or backward by tens up to 100. Next, lay out three pennies along with the dimes. Add or remove dimes as you direct your child to count by tens, starting at 3 (3, 13, 23, ...). Repeat this activity, using different numbers of pennies to have your child start counting from different numbers. Switch roles and let your child lead you in counting as well.
- Play Number Bond Addition and Subtraction. Create a number bond with a whole number between 0 and 10 but with one missing part. Ask your child to fill in the missing part and then to write an addition and a subtraction number sentence to match the number bond.



$$3 + \boxed{2} = 5$$

$$5 - 3 = \boxed{2}$$

MODELS

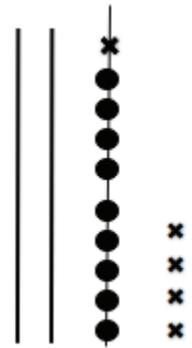
Arrow Way (Arrow Notation): A simplifying strategy that allows students to record their mental math. This strategy is often used for getting to a “friendly” number that is easy to work with, such as a ten or a hundred.

KEY CONCEPT OVERVIEW

During the next week, our math class will learn about addition up to 40. We will add one-digit and two-digit numbers by using familiar strategies, such as counting on. We will also apply the make ten strategy. For example, when adding $28 + 5$, students use a number bond to break 5 into 2 and 3. They add 28 and 2 to make the next ten (30, or 3 tens). Finally, they add 3 to 30 to make 33.

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

- Solve addition problems by drawing quick tens, ones, and number bonds to make a ten (20, 30, 40, etc.). For example, draw quick tens and ones to solve $29 + 5 = 34$. (See image at right.)
- Use simpler problems, such as $8 + 4$, to solve more difficult problems, such as $18 + 4$ and $28 + 4$.
- Use quick tens or a number bond to add ones and ones or tens and tens in problems such as $7 + 26$ or $20 + 16$.



SAMPLE PROBLEM (From Lesson 14)

Make a number bond to solve. Show your thinking with number sentences or the arrow way. Complete the place value chart with your answer.

Number bond:

$$28 + 7 = \underline{35}$$

Place value chart:

tens	ones
3	5

Number sentences:

$$28 + 2 = 30$$

$$30 + 5 = 35$$

The arrow way:

$$28 \xrightarrow{+2} 30 \xrightarrow{+5} 35$$

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HOW YOU CAN HELP AT HOME

- Write all practice problems horizontally to encourage your child to use mental strategies to solve.
- Working together, see how many different strategies you and your child can use to solve the same problem. For example, which strategies can you use to solve $18 + 4$, $25 + 7$, and $6 + 27$ (number bond, arrow way, etc.)?
- Play Add Tens Finger Flash. With your fingers, flash a number (e.g., 6), and then call out a number of tens to add to that number (e.g., “Add 2 tens.”). Your child says the number. (26) Then switch roles.

KEY CONCEPT OVERVIEW

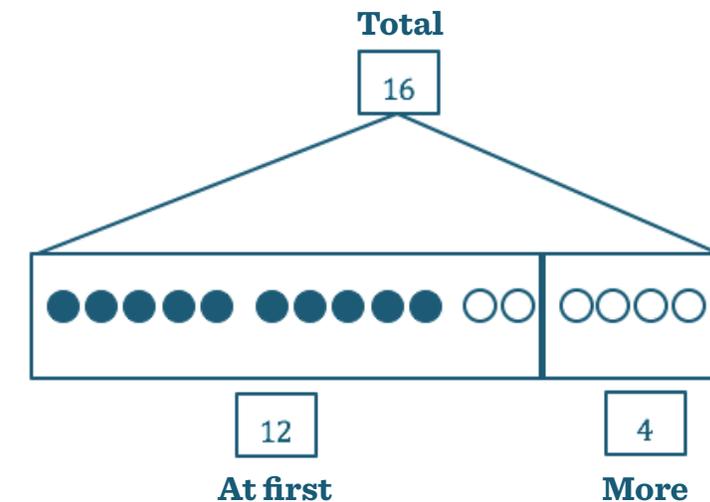
During the next week, our math class will solve word problems involving numbers up to 20. We will use the RDW process and **tape diagrams** to model and solve word problems. In class, we will share strategies for drawing a tape diagram when a part is unknown.

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?



$$12 + ? = 16$$

$$12 + 4 = 16$$

$$16 - 12 = ?$$

$$16 - 12 = 4$$

Peyton added 4 centimeter cubes.

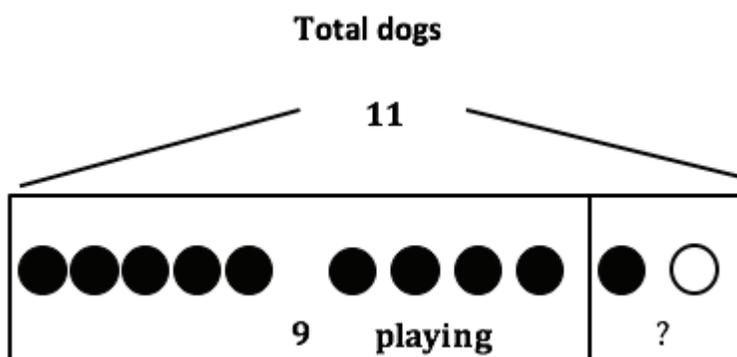
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HOW YOU CAN HELP AT HOME

- 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?



$$9 + ? = 11$$

Two more dogs came to the park.

KEY CONCEPT OVERVIEW

During the next week, our math class will add tens and ones to two-digit numbers. We will learn two strategies to make adding two-digit numbers easier. Using the first strategy, we will break a number into tens and ones so we can add the tens first and then the ones. Using the second strategy, called make a ten, we will break a number apart to make the next ten before adding the remaining part. (See Sample Problem.)

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

- Name numbers in various ways by using units of tens and ones. For example, 16 can be 1 ten 6 ones or 16 ones.
- Use number bonds and number sentences to model adding two-digit numbers in two steps: adding the tens first and then adding the ones.
- Use number bonds and number sentences to model adding two-digit numbers in two steps: making the next ten first and then adding the remaining part.
- Use quick tens and ones, number bonds, or the arrow way to record strategies for adding two-digit numbers.

SAMPLE PROBLEM (From Lesson 26)

Solve by using number bonds and the add tens or make a ten strategy.

$$19 + 13 = 32$$

Adding tens first:

$$\begin{array}{r} 19 + 13 = 32 \\ \quad \wedge \\ 10 \quad 3 \end{array}$$

$$\begin{array}{l} 19 + 10 = 29 \\ 29 + 3 = 32 \end{array}$$

Adding to make a ten first:

$$\begin{array}{r} 19 + 13 = 32 \\ \quad \wedge \\ 1 \quad 12 \end{array}$$

$$\begin{array}{l} 19 + 1 = 20 \\ 20 + 12 = 32 \end{array}$$

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HOW YOU CAN HELP AT HOME

- If your child needs additional support to solve a problem, invite him to draw quick tens and ones or use counters (pennies, beans, etc.) to visualize the problem. Help your child connect his work with drawings or counters to written number bonds and number sentences. For instance, if your child drew 19 and then began drawing 13 (to add $19 + 13$), you can say, “Let’s add ten first! And then how many more will you add? Yes, 3.”
- Play Take Out 1 or 2: Call out a variety of one- and two-digit numbers. Challenge your child to take out 1 from each number and identify the two number parts created. For instance, you say, “6.” Your child says, “1 and 5.” You say, “18.” Your child says, “1 and 17.” After a few rounds, repeat the activity, but have your child take out 2 from each number.
- Play Get to 10 or 20: Arrange 1 to 10 pennies in 5-group formation (rows of five). Ask your child to identify the amount of money shown (e.g., 9 cents). Then, challenge her to provide the addition sentence to get to 10 cents (e.g., 9 cents + 1 cent = 10 cents). After a few rounds, add a dime to the pennies and play Get to 20. Ask your child to identify the amount shown (e.g., 19 cents or 9 cents + 10 cents = 19 cents). Again, challenge your child to provide the addition sentence to get to 20 (e.g., 19 cents + 1 cent = 20 cents). Encourage her to use a variety of unit words (e.g., pennies, cents, ones, dimes, tens) as you play more rounds. For example, 1 dime and 9 pennies is 19 cents or 1 ten and 9 ones is 19 ones.