EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next few days, our math class will learn about length and height by comparing two objects side by side. When students hold a new pencil next to a new crayon, for example, they find that the pencil is longer and the crayon is shorter. Students discover that when two objects they are comparing are not aligned, it becomes more difficult to tell which is taller, or longer, and which is shorter. For example, "If I stand on a chair, it seems as if I'm taller than my teacher!" Students learn to line up **endpoints** before comparing lengths. For example, "When we stand side by side, it's easy to see that my teacher is taller. Our feet are the endpoints."

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

- Draw something taller or shorter than the object pictured.

- Find objects at home that are longer or shorter than a length of string.

- Compare the length of the object pictured with the length of a new crayon.

SAMPLE PROBLEM *(From Lesson 1)*

In each pair, circle the shorter object.

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

For more resources, visit » *Eureka.support*

HOW YOU CAN HELP AT HOME

- Play I Spy with household items, providing clues related to their length (longer/shorter) and height (taller/shorter). For example, say, "I spy something longer than an eraser but shorter than a pencil." Encourage your child to ask questions (e.g., "Is it a cup?" "Is it a spoon?"), and continue to provide clues until your child is able to guess the item you spied.

- Choose an object. Ask your child to find something in your home that is the same length as that object.

TERMS

Endpoint: The point where something begins or ends.

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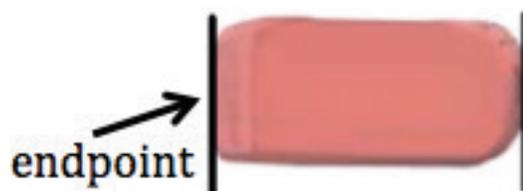
KEY CONCEPT OVERVIEW

During the next few days, our math class will continue learning about length and height as students compare the length of objects with a **linking cube stick**. Using a unit of measure allows students to be more precise when telling how long or short an object is; for example, "My scissors are as long as seven cubes."
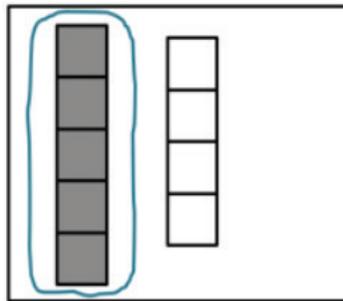
You can expect to see homework that asks your child to do the following:

- Find the linking cube stick that is longer, shorter, or the same length as a given object.
- Color linking cube sticks to show the length of an object.

SAMPLE PROBLEM   *(From Lesson 5)*

Circle the longer stick.

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 say the pattern of *1 more* while pretending to walk up a staircase by marching in place: "One—1 more is 2. Two—1 more is 3. Three—1 more is 4." When your child is comfortable with 1 more, challenge him to reverse the pattern by pretending to walk down the stairs while saying the pattern in reverse: "Ten—1 less is 9. Nine—1 less is 8."
- Encourage your child to practice counting the **Say Ten** way: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Ten 1, Ten 2, Ten 3 ... up to Ten 9. Make it fun by inviting your child to count in a funny voice, such as that of an angry bear or a scared mouse.

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 1, Say Ten counting extends to three-digit numbers up to 120.

eighteen	1 ten 8
forty-eight	4 tens 8
one hundred eighteen	1 hundred 1 ten 8

MODELS

Linking Cube Stick: A stick of 1 to 10 interlocking cubes, with a color change after the fifth cube.

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KEY CONCEPT OVERVIEW

During the next week, our math class will compare the weights of objects in the classroom by using the words *heavier than*, *lighter than*, or *the same as*. At first, students will compare based simply on feel and may be surprised to find, for example, that even though a cotton ball and a rock are the same size, the rock is heavier than the cotton ball. Students will use a **balance scale** to say exactly how two items compare: "The marker is as heavy as seven pennies!"

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

- Draw something heavier or lighter than the object pictured.

- Count to find out how many cubes are as heavy as a given object.

- Draw squares to represent linking cubes so each side of the balance scale weighs the same. (See image on the right.)
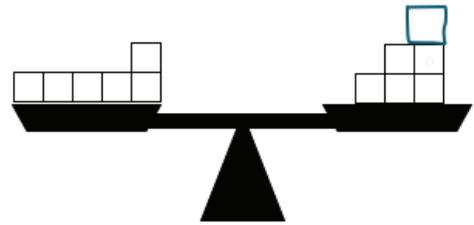
SAMPLE PROBLEM *(From Lesson 12)*

Draw pennies to show that the pen is as heavy as five pennies.
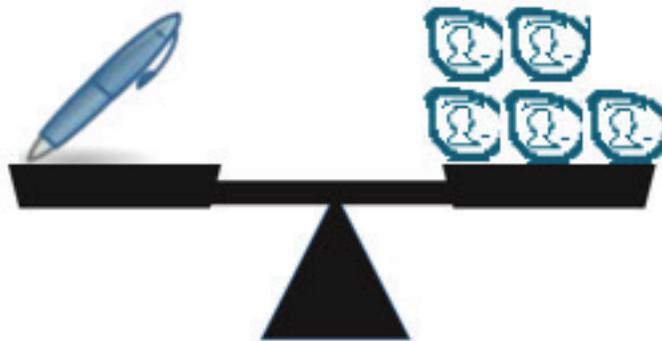
HOW YOU CAN HELP AT HOME

- Ask your child to compare the weights of two objects by placing one in each hand and seeing which hand drops lower or feels heavier.

- Write the numbers 1 to 10 in order. Ask your child to close her eyes while you cover one or two numbers with pennies. Challenge your child to open her eyes and figure out which number(s) are hidden.

- Say a sequence of three teen numbers (11–19), replacing one number with "beep." For example, say, "12, beep, 14." Have your child identify the "beep" number: "The beep number is 13."

MODELS

Balance Scale: A tool used to compare weight. Grade K students use a balance scale to determine which object is heavier or lighter.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next few days, our math class will compare the volume (**capacity**) of various containers by filling them with rice. Students will notice that both the size and the shape of the container affect how much it can hold. For example, a tall skinny vase can hold the same amount as a short wide mug. Students also count to determine how much each container holds. For example, a student might find that it takes 10 scoops of rice to fill a teacup. "Whoa! Ten scoops of rice is the same as one teacup!" (Note that homework in this topic reviews number skills from Module 1.)

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

- Circle the two parts that make up six objects in each rectangle.
- Circle the two parts that make up seven objects in each rectangle.

SAMPLE PROBLEM *(From Lesson 13)*

NOTE: Students completed a math lab in class in which they compared the amount of rice that different sizes of containers could hold.

Consider the containers from the lesson. In the first box, draw a picture of the container that could hold the most amount of rice. In the second box, draw a picture of the container that could hold the least amount of rice.

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

- Have your child compare the capacity of two containers. Invite your child to pour liquid, rice, or sand from Container A into Container B. Ask your child to tell whether Container A holds more than, less than, or the same as Container B.
- Draw 10 objects on a piece of paper. Invite your child to find and circle groups of twos, threes, fours, and fives within the larger group of 10.

TERMS

Capacity: The maximum amount that a container can hold.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next few days, our math class will continue comparing objects, now with the goal of deciding whether there is "enough" in a variety of real-world situations. For example, students will draw lines to match puppies with bones to determine whether there are enough bones for all the puppies. Students will use *more than* and *fewer than* to describe situations in which there is not enough of something.

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

- Draw lines matching items in one group with items in another to determine whether there are enough.

- Draw more items to make the number of items in each group the same.

SAMPLE PROBLEM *(From Lesson 17)*

Draw straight lines with your ruler to see whether there are enough flowers for the butterflies.

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

- Invite your child to draw up to 10 simple objects (e.g., bees, sun, fish) on a piece of paper. Then you draw the same number of matching items (e.g., hives, clouds, ponds). Challenge your child to draw lines matching, for example, each bee to a hive. Ask questions about the drawings, and have fun with it: "Does each bee have a hive? Will the sun peek from behind each cloud?" For an added challenge, draw more or fewer items than your child draws and encourage him to use *more than* or *fewer than* to describe the difference.

- Play Make It Equal. Gather an even number of at least 20 items, such as pennies or buttons, and place them in a pile. Each partner takes a small handful of up to 10 items from the pile. Partners line up their items and count. The partner with fewer items takes more items from the pile, one at a time, until each partner has an equal number of items.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next week, our math class will begin comparing groups, or sets, of objects. At first, students will use what they already know about length: "A stick of 7 cubes is longer than a stick of 3 cubes. So 7 is more than 3." Then students will count to compare groups of loose objects, such as pennies. Finally, students will form groups of objects that have 1 more, 1 less, or the same number as a given set.

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

- Color and compare different numbers of objects arranged in two lines. Tell which number of objects is more or less than the other number of objects.

- Count to compare two groups of objects that are scattered about. Tell which group has more or fewer objects.

- Draw a set of objects that has 1 more, 1 less, or the same number as the given set.

SAMPLE PROBLEM *(From Lesson 20)*

Count the dots on the die. Color the same number of beads as there are dots on the die.

Circle the string of beads with more beads colored. Fill in the sentence frame to match.
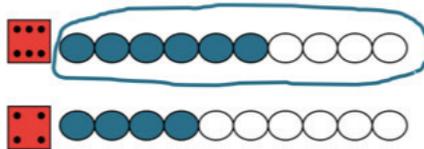
_6_ is more than _4_.

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

- Ask your child to count and compare objects in your home. "Do you have more toy cars or more action figures? More puzzles or more dolls?"

- Play Roll, Draw, Compare. Invite your child to roll a die, count the dots, and then draw the same number of circles. Then ask her to roll the die again, count the dots, and this time draw the same number of squares. Challenge your child to tell whether the number of circles is more than, less than, or the same as the number of squares.

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next week, our math class will use counting skills to compare two sets of objects, saying which number is more than and which number is less than the other number. One strategy we will learn is to line up the objects in each set and match them one-to-one (making as many pairs as possible), and then see whether either set has extra objects. As we learn more, our class will count and compare without using physical objects; for example, students will compare 3 claps to 5 stomps just by listening and counting.

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

▪ Count and compare sets of objects arranged in two lines. Tell which set has more or fewer objects.

▪ Using squares to represent a tower or train of cubes, draw more or fewer squares than a given tower or train. Then count and compare.

▪ Compare numbers without using drawings or physical objects. For example, shown two numbers, students record which number is more and which is less than the other number.

SAMPLE PROBLEM *(From Lesson 25)*

Count the objects in each line. Write how many in the box. Then fill in the blanks in the sentence to compare the numbers.
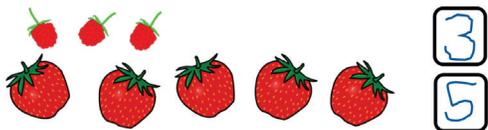
_5_ is more than _3_.

HOW YOU CAN HELP AT HOME

- Invite your child to show a number of fingers, between one and nine, the Math Way (counting from left to right, starting with the pinky of the left hand). For example, hold up the left pinky, left ring finger, and left middle finger to show three fingers. Ask how many more fingers make ten (7). When showing numbers the Math Way, students can easily see that the fingers held down can be added to the fingers held up to make ten.

- Use playing cards to compare numbers. Take out the jacks, queens, kings, aces, and jokers. Then place the deck facedown between partners. Each partner takes a card. Partners flip over their cards at the same time and compare numbers. The partner with the greater number takes both cards and states, for example, "9 is more than 6." Partners continue until all cards have been flipped over. The partner with more cards wins. Play again, only this time the partner with the smaller number collects both cards and states, for example, "6 is less than 9."

EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next week, our math class will summarize our understanding of length, weight, capacity, and numbers through some exploratory activities. We will spend time closely examining objects and considering all of the different measurable ways we can compare them. In making these comparisons, students decide which tools they need to help them. For example, students will use balance scales to compare weights, linking cubes to compare heights or lengths, and various containers to compare capacities.

You can expect to see homework that asks your child to do the following:
- Decide whether a container is full (to the brim), not full (contains some liquid but has room for more), or empty.

- Become more fluent in ways to make 6 and ways to make 10. For example, on a tree with 10 apples, students are instructed to color a given number of apples to show the parts that make 10.

- Draw something longer or shorter than the length of a familiar object, such as the length of the student's thumb.

SAMPLE PROBLEM *(From Lesson 29)*

Draw a line from each container to the word that describes the amount of liquid the container is holding.
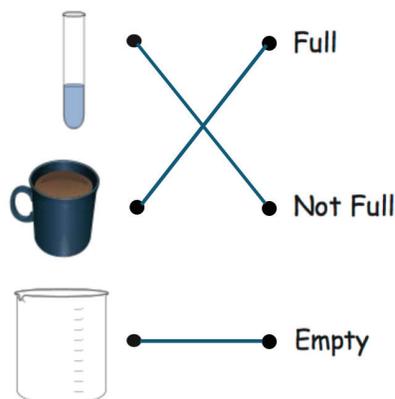
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HOW YOU CAN HELP AT HOME

- Encourage your child to use measurement words when describing the size of an object. Rather than saying something is big or small, your child might say that something is longer, is taller, is heavier, can hold more, or takes up more space than another object. Ask what tool(s) he could use to help compare the objects (e.g., the balance scale).

- Say a number from 1 to 4, and ask your child how many more to make 5. For an added challenge, encourage your child to count without using fingers.