

## KEY CONCEPT OVERVIEW

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During the next few days, our math class will learn about comparing lengths. We will learn how to make direct comparisons. For example, the crayon is shorter than the paper. We will also learn how to make indirect comparisons. For example, the rabbit is shorter than the dog, and the dog is shorter than the cow, so the rabbit must be shorter than the cow.

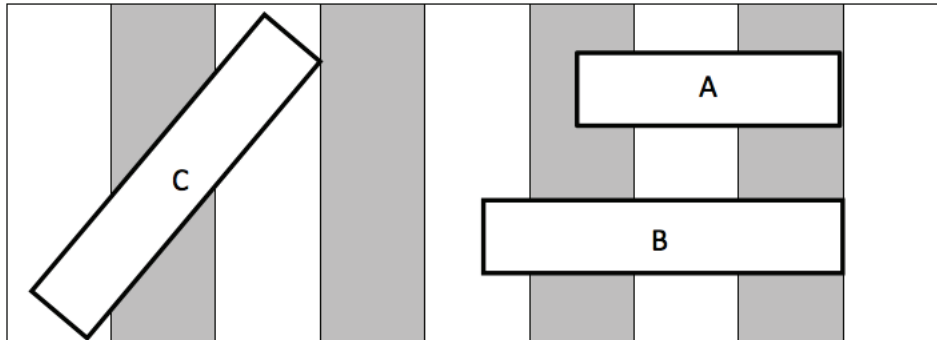


You can expect to see homework that asks your child to do the following:

- Compare the lengths of objects by using the words *shorter than*, *longer than*, and *the same length as*.
- Order objects from shortest to longest.
- Make indirect comparisons by analyzing lengths. For example, if the scissors are longer than the crayon, and the eraser is shorter than the crayon, which is the longest: the crayon, the scissors, or the eraser?

## SAMPLE PROBLEM (From Lesson 3)

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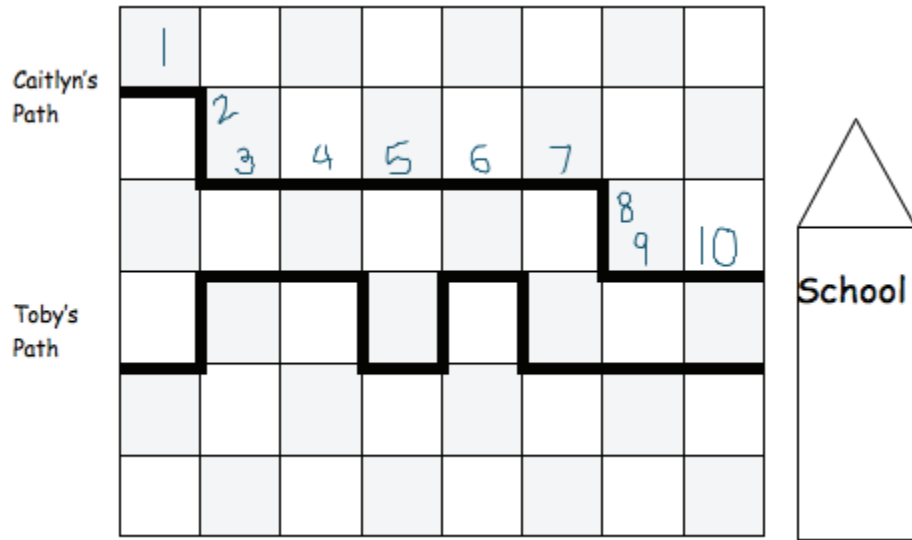


- Which is the shortest rectangle? **Rectangle A**
- If Rectangle B is shorter than Rectangle C, which is the longest rectangle? **Rectangle C**
- Order the rectangles from shortest to longest. **A, B, C**

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

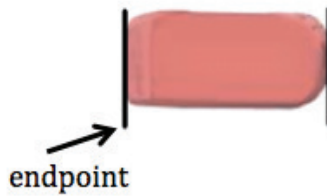
**HOW YOU CAN HELP AT HOME**

- Reinforce place value understanding in preparation for Module 4. Practice saying numbers the Say Ten way. Partner A says a number (e.g., 43) and Partner B says the number the Say Ten way (4 tens 3).
- Provide opportunities for your child to measure and compare lengths in the home. He can use a household item (e.g., a string, an index card, a paper clip) as a measurement tool. Ask your child to use the words *longer than*, *shorter than*, and *the same length as* to compare the measured objects (e.g., “My shoe is four paper clips shorter than Ruthie’s shoe!”).
- If your child has difficulty tracing and counting the distance of the paths (see Lesson 3 Homework), guide her to write numbers on the lines of the paths while counting.



**TERMS**

**Endpoint:** The point where something begins or ends.



## KEY CONCEPT OVERVIEW

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During the next few days, our math class will get an introduction to the idea of a **length unit**, taking the concepts of *longer than* and *shorter than* to a new level of precision. We will lay **centimeter** cubes end to end along the length of an object with no gaps or overlaps. Then we will learn that the total number of cubes represents the length of that object in centimeters. Finally, we will compare lengths by using statements such as, “The pencil measures 10 centimeters. The crayon measures 6 centimeters. So the pencil is longer than the crayon.”

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

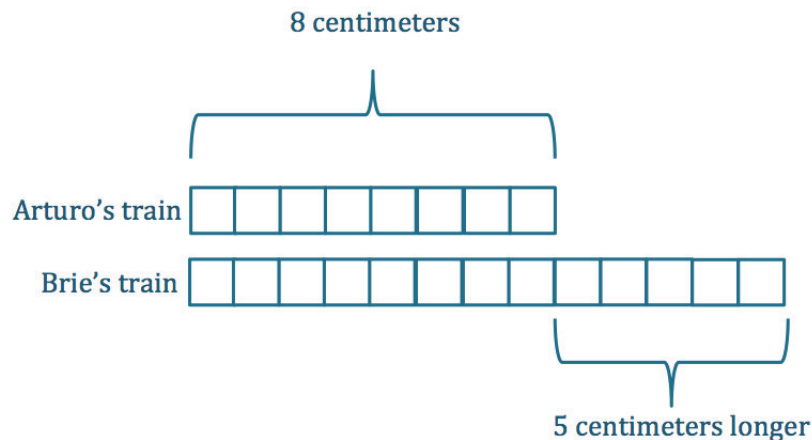
- Measure objects by using centimeter cubes, and then complete comparison statements about the relative lengths of the objects.
- Measure objects by using centimeter cubes, and order the objects from shortest to longest.
- Use the **RDW process** to solve word problems about length.

## SAMPLE PROBLEM (From Lesson 6)

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Use the centimeter cubes that your teacher gave you to model each length, and answer the question.

Brie makes a cube train that is 5 centimeters longer than Arturo’s train. If Arturo’s train is 8 centimeters long, how long is Brie’s train?



$$8 + 5 = 13$$

***Brie's train is 13 centimeters long.***

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

**HOW YOU CAN HELP AT HOME**

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- Help your child practice addition and subtraction up to 20. Starting at zero, partners take turns rolling a die, adding the number on the die to the total, and stating the addition number sentence. For example, Partner A rolls 6 and says, “ $0 + 6 = 6$ .” Partner B rolls 3 and says, “ $6 + 3 = 9$ .” Partners continue until they get to 20, without going over. (If the total is 18, for example, partners take turns rolling until someone rolls a 2.) Play a similar game with subtraction, starting at 20 and subtracting each roll of the die until you reach zero.
- Ask your child to order objects in your home from shortest to longest or vice versa. For example, your child might say, “The couch is longer than the coffee table. The coffee table is longer than the chair. The order from shortest to longest is chair, coffee table, couch.”
- When solving word problems where the difference is unknown (e.g., “If Sam has 9 apples and Maria has 12, how many more apples does Maria have than Sam?”), encourage your child to share more than one solution strategy. She might think in terms of addition: “Nine plus which mystery number gives me 12?” (3) Alternatively, she might think in terms of subtraction: “When I take 9 away from 12, I get 3.”

**TERMS**

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**Centimeter:** A metric unit of length. One inch is about as long as 2.5 centimeters.

**Length unit:** A unit that can be used to measure distance from end to end (e.g., centimeter, meter, inch, foot).

**RDW process:** A three-step process used in solving word problems. **RDW** stands for Read, Draw, Write: **R**ead the problem for understanding; **D**raw a picture to help make sense of the problem; **W**rite an equation and a statement of the answer.

## KEY CONCEPT OVERVIEW

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During the next few days, our math class will explore the importance of measuring with standard, same-sized units. We will answer questions such as, “If Bailey uses paper clips and Maya uses toothpicks and they both measure the same items in our classroom, will they be able to compare their measurements?” Finally, we will solve word problems relating to length.

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

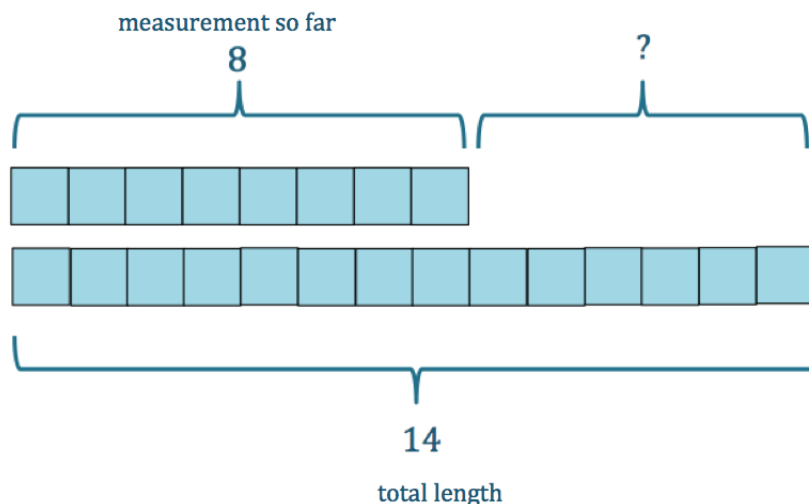
- Measure objects twice by using two different length units.
- Measure objects in the home by using a chosen length unit, such as a paper clip, and then order the objects from shortest to longest.
- Use the RDW process to solve word problems related to length by making a math drawing with a centimeter cube. (See Sample Problem.)

## SAMPLE PROBLEM (From Lesson 9)

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Use your centimeter cubes to model the problem. Then solve by drawing a picture of your model and writing a number sentence and a statement.

Peyton is measuring a ribbon that is 14 centimeters long. If she has already put down 8 centimeter cubes, how many more will she need to finish her measurement?



$$8 + \square = 14$$

$$8 + \boxed{6} = 14$$

*Peyton needs 6 more cubes to finish measuring her ribbon.*

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

**HOW YOU CAN HELP AT HOME**

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- Encourage your child to explain his math drawing when solving word problems. For example, “I know that Mona’s hair grew 7 centimeters, so I used my centimeter cubes to make a box that is 7 centimeters long. Claire’s hair grew 15 centimeters, so I knew that box would be longer than the one I drew for Mona’s hair.”
- Help your child stay sharp with addition and subtraction skills up to 20. Starting at zero, partners take turns rolling a die, adding the number on the die to the total, and stating the addition number sentence. For example, Partner A rolls 6 and says, “ $0 + 6 = 6$ .” Partner B rolls 3 and says, “ $6 + 3 = 9$ .” Partners continue until they get to 20, without going over. (If the total is 18, for example, partners take turns rolling until someone rolls a 2.) Play a similar game with subtraction, starting at 20 and subtracting each roll of the die until you reach zero.
- When solving word problems, encourage your child to draw a box to represent the unknown number, for example,  $8 + \square = 14$ ;  $8 + 6 = 14$ . The box helps to clarify the misconception that the answer always comes after the equal sign.

## KEY CONCEPT OVERVIEW








During the next week, our math class will learn how to collect **data**, organize the data in **graphs** and **tables**, and interpret the data.

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

- Collect, sort, and organize data, including using **tally marks** as an efficient counting strategy.
- Ask and answer questions about data presented in graphs and tables.
- Create and solve word problems about sets of data.

## SAMPLE PROBLEM (From Lesson 12)

A group of 16 students were asked to name their favorite fruit; 7 students named apples, 6 students named blueberries, and 3 students named melon. Draw squares with no gaps or overlaps to organize the data. Line up your squares carefully.

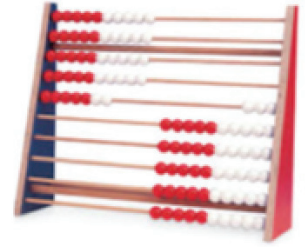
Students' Favorite Fruit	Number of Students		represents 1 student
<p>Apples</p> 			
<p>Blueberries</p> 			
<p>Melon</p> 			

1. How many more students named blueberries than melon as their favorite fruit? **3 students**
2. Write a number sentence to tell how many students named their favorite fruit.  **$7 + 6 + 3 = 16$**
3. Write a number sentence to find how many fewer students named melon than apples as their favorite fruit.  **$7 - 3 = 4$**

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at [GreatMinds.org](http://GreatMinds.org).

**HOW YOU CAN HELP AT HOME**

- Help your child stay sharp with addition and subtraction skills up to 20. Starting at zero, take turns rolling a die, adding the number on the die to the total and stating the addition number sentence. For example, you roll a 6 and say, “ $0 + 6 = 6$ .” Your child rolls a 3 and says, “ $6 + 3 = 9$ .” Continue until you get to 20, without going over. (If the total is 18, for example, you must take turns rolling until someone rolls a 2.) You can play a similar game with subtraction, starting at 20 and subtracting the number on the die from the total until you reach zero, without going below zero.
- Reinforce your child’s place value understanding in preparation for Module 4. With your child, practice saying numbers the Say Ten way. For example, you say “43,” and your child says “4 tens 3.”
- If your child struggles with place value understanding (e.g., recognizing tens and ones), consider using a visual tool such as a Rekenrek (see image at right), or drawing a picture or a quick tens and ones representation.

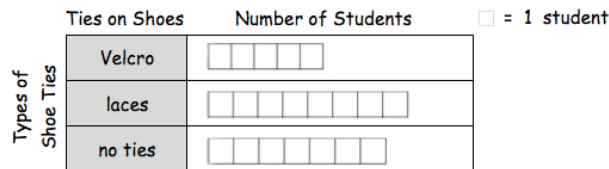


**TERMS**

**Data:** A set of facts or information.

**MODELS**

**Graph:** A visual representation of data.



**Table:** A representation of data using rows and columns.

Toy	Number of Students
Stuffed Animals	11
Toy Cars	5
Blocks	13

**Tally Marks:** A quick way of recording numbers in groups of five; used to keep track of results.

Ice Cream Flavor	Tally Marks	Votes
Chocolate		4
Strawberry		3
Cookie Dough	 	10