Just in Time Quick Check

Standard of Learning K.MG.1

Strand: Measurement and Geometry

Standard of Learning K.MG.1

The student will reason mathematically by making direct comparisons between two objects or events using the attributes of length, height, weight, volume, and time.

Students will demonstrate the following Knowledge and Skills:

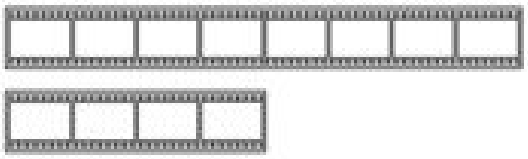
a) Use direct comparisons to compare, describe, and justify the:
   i) lengths of two objects using the terms longer or shorter;
   ii) heights of two objects using the terms taller or shorter;
   iii) weights of two objects using the terms heavier or lighter;
   iv) volumes of two containers using the terms more or less; and
   v) amount of time spent on two events using the terms longer or shorter.

Just in Time Quick Check

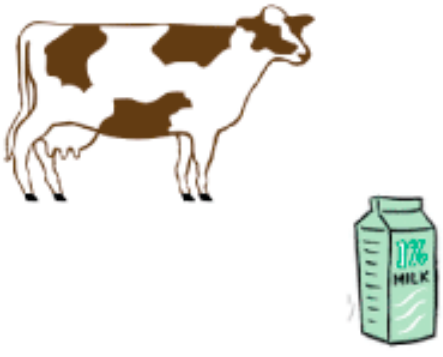
Just in Time Quick Check Teacher Notes

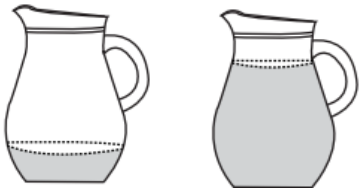
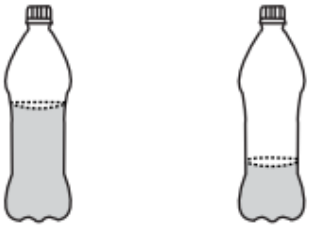
Supporting and Prerequisite SOL: N/A

K.MG.1 Just in Time Quick Check: Student Interview

Which nail is longer?	Which strip is shorter?
	

Which ladder is taller?	Which animal is shorter?
	

Which of these is heavier? (the cow or the milk carton)	Which of these objects is lighter? (the paper clip or the scissors)
	

Which of these containers has less juice?	Which of these bottles has more water?
	

Which of these takes a longer amount of time?	Which of these takes a shorter amount of time?
 Taking a nap  Drinking water	 Coloring a picture  Shaking a hand

Note: As the teacher asks a student each of the questions above, they can record student responses and any additional notes in the chart below.

Skill	Response Correct	Response Incorrect	Additional Notes
Lengths of two objects (longer/shorter)			
Heights of two objects (taller/shorter)			
Weights of two objects (heavier/lighter)			
Volumes of two containers (more/less)			
Time spent on two events (longer/shorter)			

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Common Errors/Misconceptions and their Possible Indications

Some students may understand the vocabulary words long, short, tall, short, heavy, light, more, less but may struggle to use them appropriately when making comparisons. These students would benefit from additional opportunities to use these terms when making direct comparisons with items in the classroom and at home. It is recommended that objects, situations, and events that are common and familiar to students be used for further exploration and during instruction.

Some students may struggle particularly when comparing volume and time. This may be due to limited experience with these concepts. For students who struggle with comparing the volume of two containers, it may be helpful to provide opportunities to practice this skill throughout the school year. Ensure that students use the same measuring unit (e.g., large cubes, small cubes, beans) to determine which container holds more. For students who struggle with one-to-one correspondence, it may be helpful to provide measuring units that are larger, so that there are fewer to count; then, as students make progress in their counting abilities, decrease the size of the unit used so that students have additional opportunities to count larger amounts.

Some students may struggle with telling which event will take more time. Time is abstract for young children. As a result, they will need lots of experience considering which event or task takes longer. Providing opportunities during the school day to compare the lengths of time that two events take will be beneficial as students develop their understanding of the concept of time. Some ideas might include asking students: Will it take more time to do one jumping jack or ten jumping jacks? Which takes less time – walking across the room or walking to the front office? Testing out these ideas could be helpful to many students who are struggling to identify events that take more or less time. Note: At this level, students are not expected to know how much time an event takes; instead, they should just be able to directly compare which event takes more or less time.