Name

Date _____

1. Each student in the class put a sticky note on the table to show the vegetable he or she likes best. Use the graph below to answer the questions. Remember to label your answers.

	Broccoli	Peas	Carrots
	(All and a second se	A CONTRACTOR OF	1
Number of Students			

Vegetables that Students Like Best

- a. How many students like carrots the best?
- b. How many students like carrots and peas the best?
- c. How many total students answered the survey?
- d. How many more students like broccoli than like peas the best?
- e. How many fewer students like broccoli than like carrots the best?



2. Cesar has a piece of string that he wants to use to compare how far his cat's bed and his





dog's bed are from their shared water bowl.

- The string is a lot longer than the dog's path to the bowl.
- The string is a lot **shorter** than the cat's path to the bowl.

Whose path is shorter to the water bowl, the dog's or the cat's? Draw a picture to show how you know.



3. Circle the pictures that show a correct measurement.



a. Why did you pick these pictures? Explain your thinking with two reasons.

- b. What was the length measurement of the bone for each correct picture?
- c. Why are the measurements for (d) and (e) different?

4. Measure the length of the picture of each item with centimeter cubes.



- b. Order the train, pencil, and lollipop from shortest to longest.
- c. Which item, or items, are longer than the lollipop?

d. How much longer is the pencil than the train?

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A Progression Toward Mastery							
Assessment Task Item and Standards Assessed	STEP 1 Little evidence of reasoning without a correct answer. (1 Point)	STEP 2 Evidence of some reasoning without a correct answer. (2 Points)	STEP 3 Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)	STEP 4 Evidence of solid reasoning with a correct answer. (4 Points)			
1 1.MD.4 1.OA.1	The student demonstrates little to no understanding of how to read or interpret the graph.	The student demonstrates some understanding of how many students are represented in the graph in a given category or categories (may be off by one or two) but is unable to solve either of the comparison problems accurately.	The student correctly solves (a), (b), and (c) but solves (d) or (e) incorrectly. Or, the student solves the comparison problems (d) and (e) correctly but is unable to correctly solve (a), (b), and/or (c).	 The student correctly: Identifies, labels, and solves (a) as 7, (b) as 11, and (c) as 16. Compares the quantities and writes the difference between the two quantities for questions (d) 1 student, and (e) 2 students. 			
2 1.MD.1	The student demonstrates little to no understanding of the comparison.	The student demonstrates some understanding of how the string can be used to compare the two paths (i.e., by using pictures) but provides inaccurate responses.	The student identifies that the dog's path is shorter, but is unable to provide a clear explanation. Or, the student incorrectly identifies that the cat's path as shorter but is able to draw a picture to explain (this may reflect a linguistic interpretation issue).	 The student correctly: Identifies that the dog's path is shorter. Explains how the string could be used to compare the distance from each pet's bed to the water bowl (transitivity) by drawing pictures. 			

Assessment Task Item and Standards Assessed	STEP 1 Little evidence of reasoning without a correct answer. (1 Point)	STEP 2 Evidence of some reasoning without a correct answer. (2 Points)	STEP 3 Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)	STEP 4 Evidence of solid reasoning with a correct answer. (4 Points)
3 1.MD.2 1.OA.1	The student demonstrates little to no understanding of proper measurement techniques or the reasoning behind them.	The student demonstrates some understanding of proper measurement techniques by either selecting or measuring the correct items but cannot explain her thinking clearly and accurately. Or, the student demonstrates some understanding of her thinking behind measurement methods but cannot measure or identify measurements accurately.	 The student clearly and accurately completes three out of the four following components: Identifies (b) and (d) as having the proper measurement. Cites at least two key elements to measuring accurately (no gaps, no overlaps, attentive to endpoints, same-sized length units) in his or her own words. Identifies two correct measurements (2 paper clips and 4 centimeters; units are not required). Explains that measuring with different lengths of units (small or large paper clips) can result in different quantities of measurement for the same length item. 	 The student clearly and accurately: Identifies (b) and (d) as having the proper measurement. Cites at least two key elements to measuring accurately (no gaps, no overlaps, attentive to endpoints, same-sized length units) in his or her own words. Identifies two correct measurements (2 paper clips and 4 centimeters; units are required). Explains that measuring with different lengths of units (small or large paper clips) can result in different quantities of measurement for the same length item.
4 1.MD.1 1.MD.2 1.OA.1	The student demonstrates little to no understanding of how to measure or use the measurement to compare.	The student demonstrates some understanding of how to measure but is unable to manipulate the measurements to order or compare.	The student accurately measures and orders the items by length but is unable to solve either of the comparison problems. Or, the student is able to solve the comparison problems correctly but with slight inaccuracy in the measurements (i.e., he is off by 1 or 2 centimeters which then impacts the accuracy of (d).	 The student clearly and accurately: Measures the train (8 cm), pencil (11 cm), and lollipop (9 cm). Orders the items by length (train, lollipop, pencil). Identifies the pencil as longer than the lollipop. Solves the comparison problem correctly by identifying the pencil as 3 centimeters longer than the train.