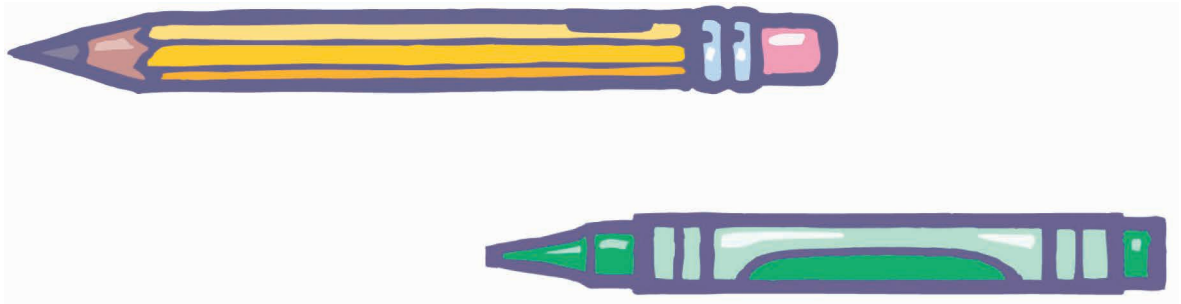


Name _____ Date _____

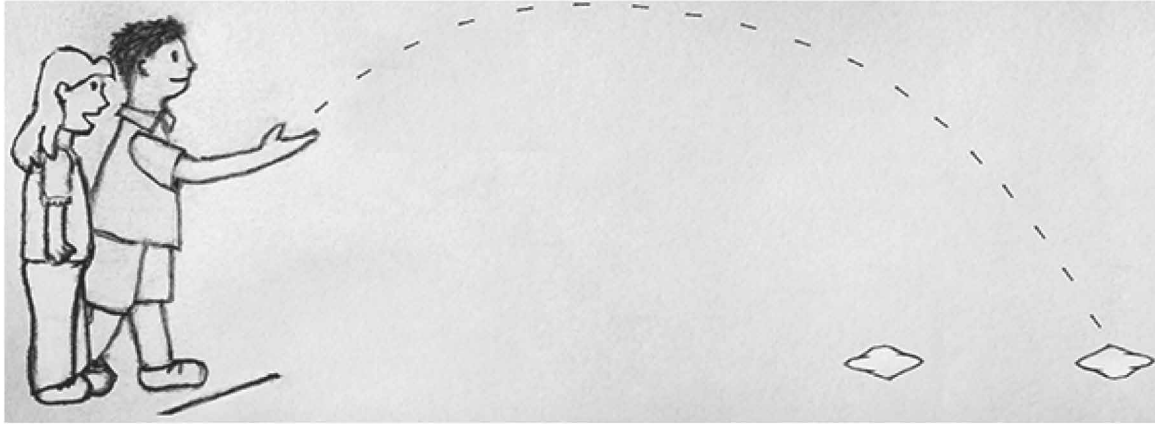
Note: Students need a centimeter ruler and 6 small paper clips to complete the assessment.

1. Use your ruler to find the length of the pencil and the crayon.



- a. How long is the crayon? _____ centimeters
- b. How long is the pencil? _____ centimeters
- c. Which is longer? pencil crayon
- d. How much longer? _____ centimeters

2. Samantha and Bill are having a beanbag throwing contest and need to measure each of their throws.



- a. Circle the most appropriate tool to measure their throws.

ruler

paper clips

meter stick

centimeter cubes

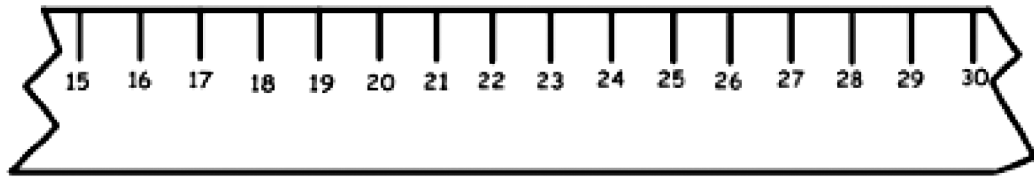
- b. Explain your choice using pictures or words.

- c. Bill throws his beanbag 5 meters, which is 2 meters farther than Samantha threw her beanbag. How far did Samantha throw her beanbag? Draw a diagram or picture to show the length of their throws.

- d. Sarah threw her beanbag 3 meters farther than Bill. Who won the contest? How do you know?

3. Use the broken centimeter ruler to solve the problem.

A grasshopper jumped 7 centimeters forward and 4 centimeters back and then stopped. If the grasshopper started at 18, where did the grasshopper stop? Show your work.



- 4.

Vanessa's Ribbons



- a. Measure the length of Ribbon A with your centimeter ruler and your paper clip. Write the measurements on the lines below.

_____ centimeters

_____ paper clips

- b. Explain why the number of centimeters is larger than the number of paper clips. Use pictures or words.

- c. Estimate the length of Ribbon B in paper clips.

_____ paper clips

- d. How much longer is Ribbon A than Ribbon B? Give your answer in centimeters.

- e. Vanessa is using the ribbons to wrap a gift. If she tapes the ribbons together with no overlap, how many centimeters of ribbon does she have altogether?

- f. If Vanessa needs 20 centimeters of ribbon, how much more does she need?

End-of-Module Assessment Task
Standards Addressed

Topics A–D

Number and Operations**The student is expected to:**

- 2.2E** locate the position of a given whole number on an open number line;
- 2.2F** name the whole number that corresponds to a specific point on a number line.

Geometry and Measurement**The student is expected to:**

- 2.9A** find the length of objects using concrete models for standard units of length;
- 2.9B** describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;
- 2.9C** represent whole numbers as distances from any given location on a number line;
- 2.9D** determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;
- 2.9E** determine a solution to a problem involving length, including estimating lengths.

Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency*. In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for students is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the students can do now, and what they need to work on next.

A Progression Toward Mastery

Assessment Task Item	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)
<p style="text-align: center;">1</p> <p style="text-align: center;">2.9A 2.9D</p>	Student gets one of the four parts correct.	Student gets two of the four parts correct.	Student gets three of the four parts correct.	Student correctly: <ul style="list-style-type: none"> ▪ Measures the crayon as 9 cm. ▪ Measures the pencil as 11 cm. ▪ Determines that the pencil is longer. ▪ Determines the difference in length between the pencil and crayon is 2 cm.
<p style="text-align: center;">2</p> <p style="text-align: center;">2.9A 2.9D 2.9E</p>	Student gets one of the four parts correct.	Student gets two of the four parts correct.	Student gets three of the four parts correct.	Student correctly: <ul style="list-style-type: none"> ▪ Identifies a meter stick as the tool for measurement. ▪ Gives appropriate reasoning for selecting the meter stick. ▪ Represents the comparison of the throws with a picture and answers that Samantha threw her beanbag 3 m. ▪ Identifies Sarah as the winner and provides accurate explanation.



A Progression Toward Mastery

<p>3</p> <p>2.2E 2.2F 2.9C</p>	<ul style="list-style-type: none"> ▪ Student shows no movement on the ruler. ▪ Student is unable to answer the question correctly. 	<ul style="list-style-type: none"> ▪ Student shows only one movement on the ruler. ▪ Student correctly adds 7 but does not subtract 4. 	<ul style="list-style-type: none"> ▪ Student shows only one movement on the ruler. ▪ Correctly identifies the grasshopper stopped at 21 cm. 	<p>Student correctly:</p> <ul style="list-style-type: none"> ▪ Uses a centimeter ruler as a number line, showing movement forward and backward as adding and subtracting. ▪ Correctly identifies the grasshopper stopped at 21 cm.
<p>4</p> <p>2.9A 2.9B 2.9D 2.9E</p>	<p>Student gets one part correct.</p>	<p>Student gets two to three of the six parts correct.</p>	<p>Student gets four to five of the six parts correct.</p>	<p>Student:</p> <ul style="list-style-type: none"> ▪ Correctly measures the length of Ribbon A as 10 centimeters and 3 paper clips. ▪ Provides an accurate explanation of why there is a larger number of centimeters. ▪ Provides an appropriate estimate for Ribbon B in paper clips. ▪ Identifies that Ribbon A is 5 cm longer than Ribbon B. ▪ Determines the total length of both ribbons taped together is 15 cm. ▪ Correctly identifies 5 cm more ribbon is needed.

Name Joshua

Date _____

Note: Students need a centimeter ruler and 6 small paper clips to complete the assessment.

1. Use your ruler to find the length of the pencil and the crayon.



a. How long is the crayon? 9 centimeters

b. How long is the pencil? 11 centimeters

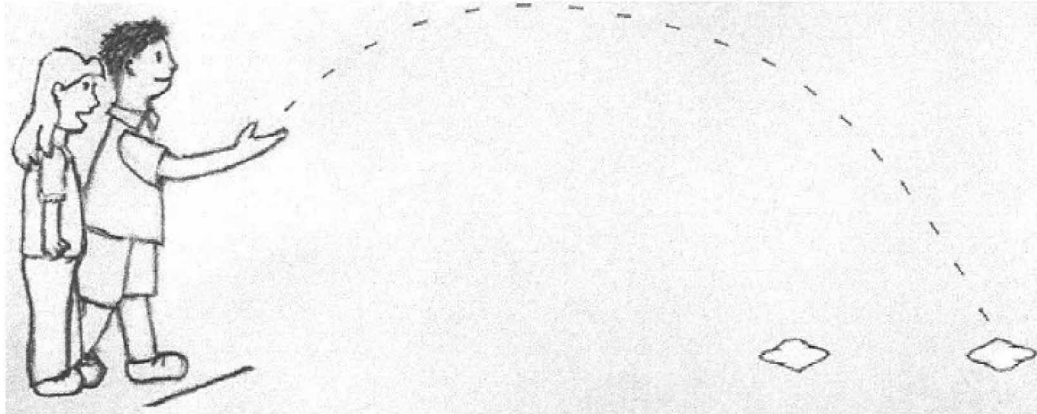
c. Which is longer? pencil crayon

d. How much longer? 2 centimeters

$$11 - 9 = 2$$

$$\begin{array}{r} \wedge \\ 1 \quad 10 \\ 10 - 9 = 1 \\ 1 + 1 = 2 \end{array}$$

2. Samantha and Bill are having a bean bag throwing contest and need to measure each of their throws.



- a. Circle the most appropriate tool to measure their throws.

ruler

paper clips

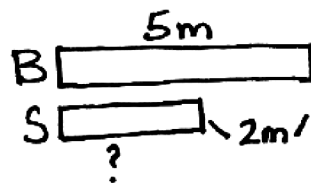
meter stick

centimeter cubes

- b. Explain your choice using pictures or words.

Samantha and Bill threw their bean bags far so a meter stick is most appropriate since it has the longest length-unit.

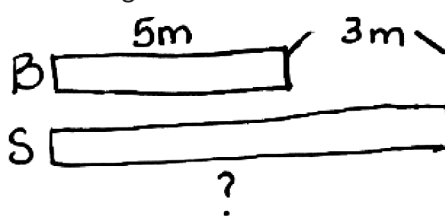
- c. Bill throws his bean bag 5 meters, which was 2 meters farther than Samantha threw her bean bag. How far did Samantha throw her bean bag? Draw a diagram or picture to show the length of their throws.



$$5 - 2 = 3$$

Samantha threw her bean bag 3 meters.

- d. Sarah threw her bean bag 3 meters farther than Bill. Who won the contest? How do you know?



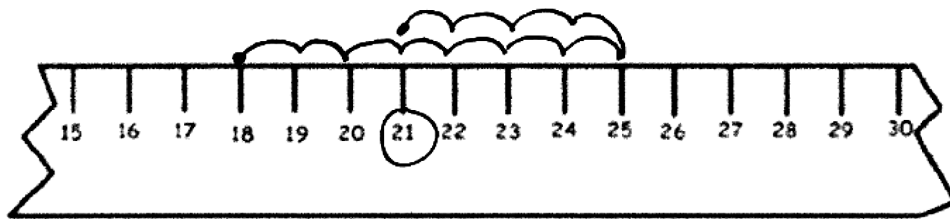
$$5 + 3 = 8$$

Sarah won the contest because she threw her bean bag 8m which is farther than anyone else.

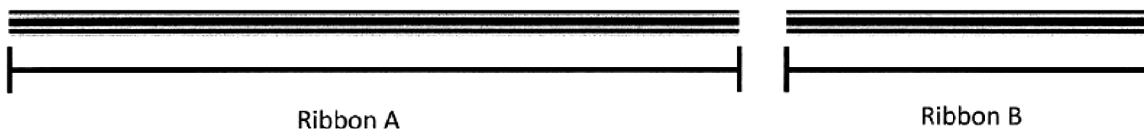
3. Use the broken centimeter ruler to solve the problem.

A grasshopper jumped 7 centimeters forward and 4 centimeters back and then stopped. If the grasshopper started at 18, where did the grasshopper stop? Show your work.

$$18 + 7 = 25 \quad 25 - 4 = 21 \quad \text{The grasshopper stopped at 21 cm.}$$



4. Vanessa's Ribbons



- a. Measure the length of Ribbon A with your centimeter ruler and your paper clip. Write the measurements on the lines below.

10 centimeters

3 paper clips

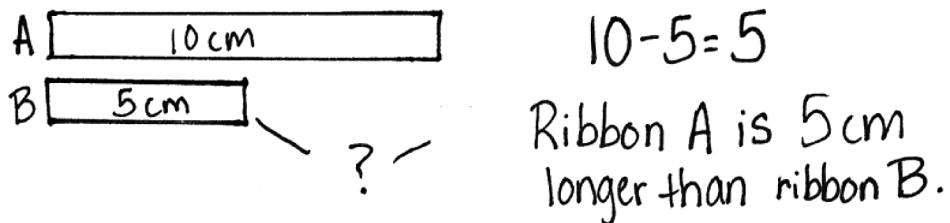
- b. Explain why the number of centimeters is larger than the number of paper clips. Use pictures or words.

Centimeters have shorter length units than paper clips, so more centimeters are needed to measure than paper clips.

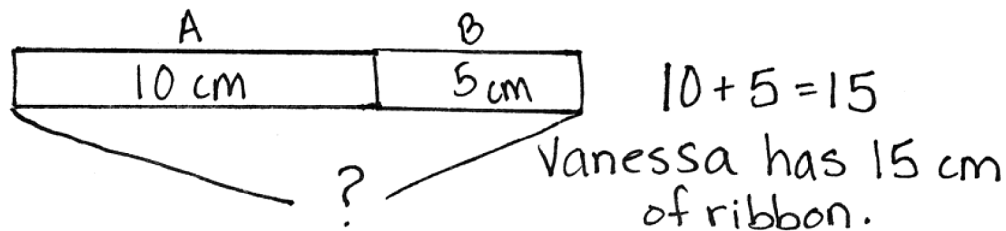
- c. Estimate the length of Ribbon B in paper clips.

2 paper clips

- d. How much longer is Ribbon A than Ribbon B? Give your answer in centimeters.



- e. Vanessa is using the ribbons to wrap a gift. If she tapes the ribbons together with no overlap, how many centimeters of ribbon does she have altogether?



- f. If Vanessa needs 20 centimeters of ribbon, how much more does she need?

$$20 \text{ cm} - 15 \text{ cm} = 5 \text{ cm}$$

Vanessa needs 5 cm of ribbon.

