

## CCSS Mathematics Assessment Task

### What is Your Favorite Pet?

Grade Level: 2

Mathematics Domain and Cluster: Measurement and Data

Represent and interpret data

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2.OA.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all position, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Student Materials:

“What is Your Favorite Pet?” Data Collection Sheet

Favorite Pet Assessment Sheet

Pencil

Clipboard (optional)

Colored Tiles (optional)

Teacher Materials:

None

Directions (for teacher to administer assessment task):

1. Pass out “What is Your Favorite Pet?” data collection sheets.
2. Direct students to collect data from their classmates by asking for their responses and recording on the data collection sheet. (Data collection sheet can be prepared with classmates’ names already entered for the student to make collection easier.)
3. After collecting data, students total the responses for each kind of pet.
4. Have students independently represent their data in picture graphs and bar graphs on the assessment sheets then answer the questions to demonstrate their understanding of the data.

Differentiation options:

- Students can use colored tiles to build the bar graph before
- The following information can be posted on charts or added to the assessment sheet to guide students in making their graphs:
  - Picture graphs should include a title, categories, category label, key, and data
  - Bar graphs include a title, scale, scale label, categories, category label, and data
- Provide small group assistance for students who need help with reading the problem or understanding the task.

Prompt:

Say: **What are your classmates’ favorite pets? Record your data from your classmates on the Data Collection Sheet. Use the data to create a picture graph and a bar graph. After you have completed your graphs, use your bar graph to answer the questions.**

## CCSS Mathematics Assessment Task

Correct or Model Answer:

Answers will depend on the data collected by the student. Graphs may look different depending on the data.

Optional: Teacher can eliminate the data collection process and give the students data collection sheets that are already filled out by the teacher. By doing this the graphs will all be the same.

Scoring Guide or Rubric: Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Representing data in a picture graph and a bar graph (2.MD.10)	<ul style="list-style-type: none"><li>• Graphs contain multiple errors.</li><li>• Data does not match graph.</li></ul>	<ul style="list-style-type: none"><li>• Graphs contain minor errors that do not affect overall representation.</li><li>• Data accurately represented.</li></ul>	<ul style="list-style-type: none"><li>• Graphs are constructed and labeled correctly.</li><li>• Data accurately represented.</li></ul>
Interpreting data in a bar graph <i>*Not stated in the standard, but a necessary skill (2.MD.10)</i>	<ul style="list-style-type: none"><li>• Student demonstrates little or no understanding of reading the graph.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates some understanding of reading the graph.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates thorough understanding of reading the graph.</li></ul>
Solving simple problems using information presented in a bar graph (2.OA.1)	<ul style="list-style-type: none"><li>• Student demonstrates little or no understanding of solving problems</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates some understanding of solving problems</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates understanding of solving problems</li></ul>

**CCSS Mathematics Assessment Task**  
**Favorite Pets**  
**Grade 2 Mathematics Assessment**

Problem:

What are your classmates' favorite pets? Record your data from your classmates on the Data Collection Sheet. Use the data to create a picture graph and a bar graph. After you have completed your graphs, use your bar graph to answer the questions.

Represent your data in a picture graph.

Represent your data in a bar graph.

## CCSS Mathematics Assessment Task

Use your bar graph to answer the following questions.

1. What were the two most favorite pets? \_\_\_\_\_

2. How many classmates chose those two pets? \_\_\_\_\_

Write your equation and show how you solved the problem.

3. What were the two least favorite pets? \_\_\_\_\_

4. How many classmates chose those two pets? \_\_\_\_\_

Write your equation and show how you solved the problem.

5. Compare the number of classmates who chose the most favorite pet with the number of classmates who chose the least favorite pet. Write your equation for your comparison and show how you solved the problem.

## CCSS Mathematics Assessment Task

Scoring Guide or Rubric: Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Representing data in a picture graph and a bar graph 2.MD.10	Graphs contain multiple errors  Data does not match graph	Graphs contain minor errors that do not affect overall representation  Data accurately represented	Graphs are constructed and labeled correctly  Data accurately represented
Interpreting data in a bar graph  *Not stated in the standard, but a necessary skill 2.MD.10	Student demonstrates little or no understanding of reading the graph	Student demonstrates some understanding of reading the graph	Student demonstrates thorough understanding of reading the graph
Solving simple problems using information presented in a bar graph 2.OA.1	Student demonstrates little or no understanding of solving problems	Student demonstrates some understanding of solving problems	Student demonstrates understanding of solving problems

# CCSS Mathematics Assessment Task

## What is your favorite pet?

Directions: Put a check in the column for your classmate's favorite pet.

## CCSS Mathematics Assessment Task

### How Do You Come To School?

Grade Level: 2

Mathematics Domain and Cluster: Measurement and Data

Represent and interpret data

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2.OA.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all position, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Student Materials:

“How Do You Come to School?” Assessment Sheets

Pencil

Clipboard (optional)

Colored Tiles (optional)

Teacher Materials:

None

Directions (for teacher to administer assessment task):

1. Pass out “How Do You Come to School?” assessment sheets.
2. Have students independently represent their data in picture graphs and bar graphs on the assessment sheets then answer the questions to demonstrate their understanding of the data.

Differentiation options:

- Students can use colored tiles to build the bar graph before working on assessment sheet—teacher should note if students can represent the data this way but not in a graph
- The following information can be posted on charts or added to the assessment sheet to guide students in making their graphs:
  - Picture graphs should include a title, categories, category label, key, and data
  - Bar graphs include a title, scale, scale label, categories, category label, and data
- For those students that need the problem read aloud you might want to pull them into a small group.

Prompt:

Say: **Bobby wants to know how his classmates come to school so he asked them and recorded his data on this table.**

**Use Bobby’s data to create a picture graph and a bar graph. After you have completed your graphs, use your bar graph to answer the questions.**

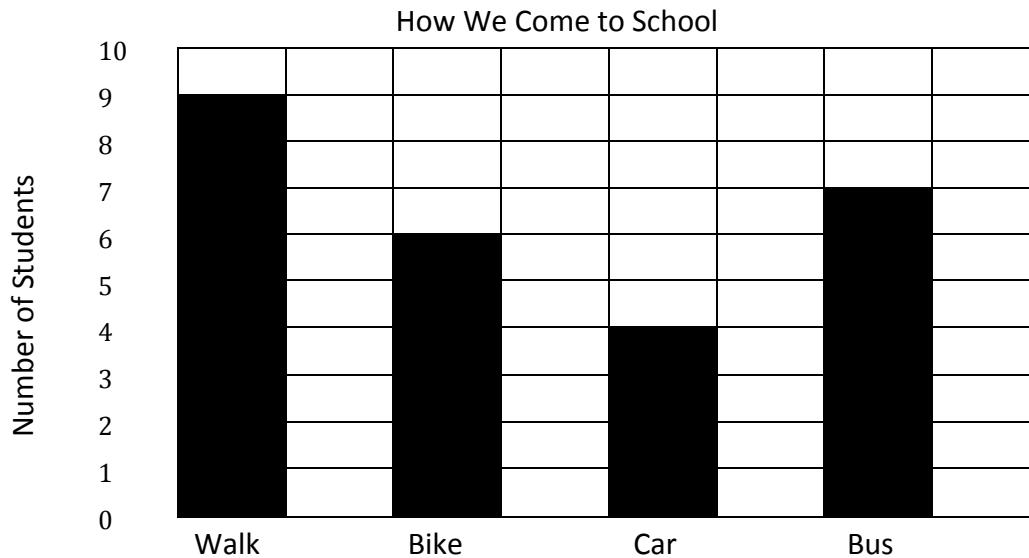
## CCSS Mathematics Assessment Task

Correct or Model Answer:

### How We Come to School

Ways to Come We School	Number of Students
Walk	☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺
Bike	☺ ☺ ☺ ☺ ☺ ☺
Car	☺ ☺ ☺ ☺
Bus	☺ ☺ ☺ ☺ ☺ ☺ ☺

Each ☺ represents 1 student



1. What is the most common way for students to come to school? Walk
2. How many students in all ride cars and bikes? 10  
Write the equation for the problem.
3. How many more students ride the walk than ride the bus to school? 2  
Write the equation for the problem.  $9 - 7 = \underline{2}$  or  $7 + \underline{2} = 9$
4. Compare the number of students who walk to the number of students who ride to school. What is the difference? Write the equation and show how you solved the problem.  $6 + 4 + 7 = 17$      $17 - 9 = 8$     8 more students ride to school than walk.

## CCSS Mathematics Assessment Task

Scoring Guide or Rubric: Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Representing data in a picture graph and a bar graph (2.MD.10)	<ul style="list-style-type: none"><li>• Graphs contain multiple errors.</li><li>• Data does not match graph.</li></ul>	<ul style="list-style-type: none"><li>• Graphs contain minor errors that do not affect overall representation.</li><li>• Data accurately represented.</li></ul>	<ul style="list-style-type: none"><li>• Graphs are constructed and labeled correctly.</li><li>• Data accurately represented.</li></ul>
Interpreting data in a bar graph <i>*Not stated in the standard, but a necessary skill (2.MD.10)</i>	<ul style="list-style-type: none"><li>• Student demonstrates little or no understanding of reading the graph.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates some understanding of reading the graph.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates thorough understanding of reading the graph.</li></ul>
Solving simple problems using information presented in a bar graph (2.OA.1)	<ul style="list-style-type: none"><li>• Student demonstrates little or no understanding of solving problems.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates some understanding of solving problems.</li></ul>	<ul style="list-style-type: none"><li>• Student demonstrates understanding of solving problems.</li></ul>

**CCSS Mathematics Assessment Task**  
**How Do We Come to School?**  
**Grade 2 Mathematics Assessment**

Problem:

Bobby wants to know how his classmates come to school so he asked them and recorded his data on this table.

Use Bobby's data to create a picture graph and a bar graph. After you have completed your graphs, use your bar graph to answer the questions.

Student's Name	Walk	Bike	Car	Bus
Mari				✓
Summer		✓		
Tyler		✓		
Bobby	✓			
Tommy				✓
Michael	✓			
Nikki		✓		
Joshua			✓	
Sammy				✓
Ross	✓			
Max	✓			
Carly			✓	
Skye	✓			
Kelly		✓		
Hannah				✓
Lyle	✓			
Jenny	✓			
Sara				✓
Mason		✓		
David		✓		
Pete	✓			
Katie			✓	
Brady			✓	
Emily	✓			
Annie				✓
Jamie				✓
Totals				

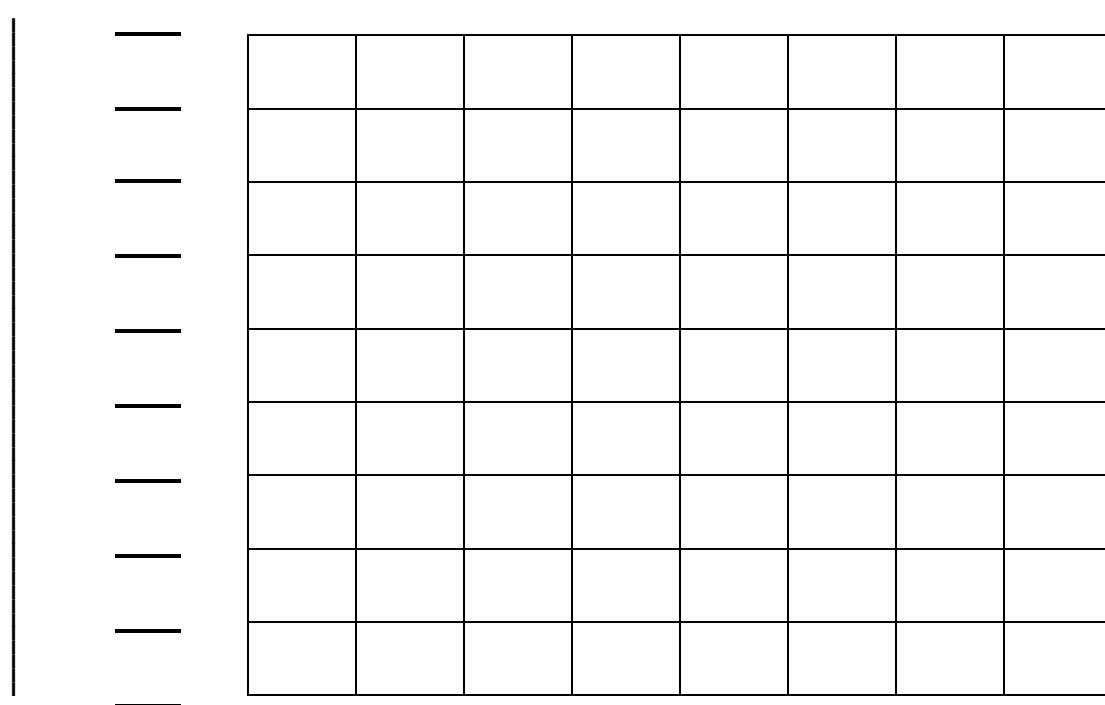
### CCSS Mathematics Assessment Task

Represent Bobby's data in a picture graph. Don't forget to label all the parts of your graph.

_____	_____
Walk	_____
Bike	_____
Car	_____
Bus	_____

Each \_\_\_\_\_ represents \_\_\_\_\_

Represent Bobby's data in a bar graph. Don't forget to label all the parts of your graph.



### CCSS Mathematics Assessment Task

Use your bar graph to answer the following questions.

5. What is the most common way for students to come to school? \_\_\_\_\_
  
6. How many students in all ride cars and bikes? \_\_\_\_\_  
Write the equation for the problem.
  
7. How many more students ride the walk than ride the bus to school? \_\_\_\_\_  
Write the equation for the problem.
  
8. Compare the number of students who walk to the number of students who ride to school. What is the difference? Write the equation and show how you solved the problem.

## CCSS Mathematics Assessment Task

**Scoring Guide or Rubric:** Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

**Scoring Guide/Rubric (a score should be awarded for each criterion below)**

<b>Criteria (CCSS code)</b>	<b>0 points</b>	<b>1 Point</b>	<b>2 Point</b>
Representing data in a picture graph and a bar graph (2.MD.10)	<ul style="list-style-type: none"> <li>• Graphs contain multiple errors.</li> <li>• Data does not match graph.</li> </ul>	<ul style="list-style-type: none"> <li>• Graphs contain minor errors that do not affect overall representation.</li> <li>• Data accurately represented.</li> </ul>	<ul style="list-style-type: none"> <li>• Graphs are constructed and labeled correctly.</li> <li>• Data accurately represented.</li> </ul>
Interpreting data in a bar graph <i>*Not stated in the standard, but a necessary skill (2.MD.10)</i>	<ul style="list-style-type: none"> <li>• Student demonstrates little or no understanding of reading the graph.</li> </ul>	<ul style="list-style-type: none"> <li>• Student demonstrates some understanding of reading the graph.</li> </ul>	<ul style="list-style-type: none"> <li>• Student demonstrates thorough understanding of reading the graph.</li> </ul>
Solving simple problems using information presented in a bar graph (2.OA.1)	<ul style="list-style-type: none"> <li>• Student demonstrates little or no understanding of solving problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Student demonstrates some understanding of solving problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Student demonstrates understanding of solving problems.</li> </ul>

## CCSS Mathematics Assessment Task

### Little Town Zoo

Grade Level: 2

Mathematics Domain and Cluster: Measurement and Data  
Represent and interpret data

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.10: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

2.OA.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all position, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Student Materials:

“Little Town Zoo Animals” Sheet

Little Town Zoo Assessment Sheet

Pencil

Scissors

Glue

Blank sheet for students to glue animal “cards”

Teacher Materials: None

Directions (for teacher to administer assessment task):

1. Pass out “Little Town Zoo Animals” sheets. Assist in reading animal names as needed.
2. Have students cut the animal word “cards” apart, arrange into groups like they would in their graphs (e.g., mammals/reptiles/birds), then glue onto a sheet of paper.
3. Have students count to find the total for each group.
4. Have students independently represent their data in picture graphs and bar graphs on the assessment sheets then answer the questions to demonstrate their understanding of the data.

Differentiation options:

- The following information can be posted on charts or added to the assessment sheet to guide students in making their graphs:
  - Picture graphs should include a title, categories, category label, key, and data
  - Bar graphs include a title, scale, scale label, categories, category label, and data
- Small group administration for students who need assistance in reading the problem.

Teacher Notes:

- Students should not sort into dichotomous groups (e.g. legs/no legs)
- Step #2 of the directions will provide information for the teacher if student can create graph with cards but not represent with bar graph or line graph

Prompt:

Say: **The Little Town Zoo is too little so the zookeeper wants to add more animals. Help the zookeeper know what kind of animal he should get. Use the data to create a picture graph and a bar graph. After you have completed your graphs, answer the questions that will help the zookeeper.**

## CCSS Mathematics Assessment Task

Correct or Model Answer:

Answers will depend on the way students organize the data. Graphs may look different depending on the data.

Optional: Teacher can determine how students sort the animals. By doing this the graphs will all be the same.

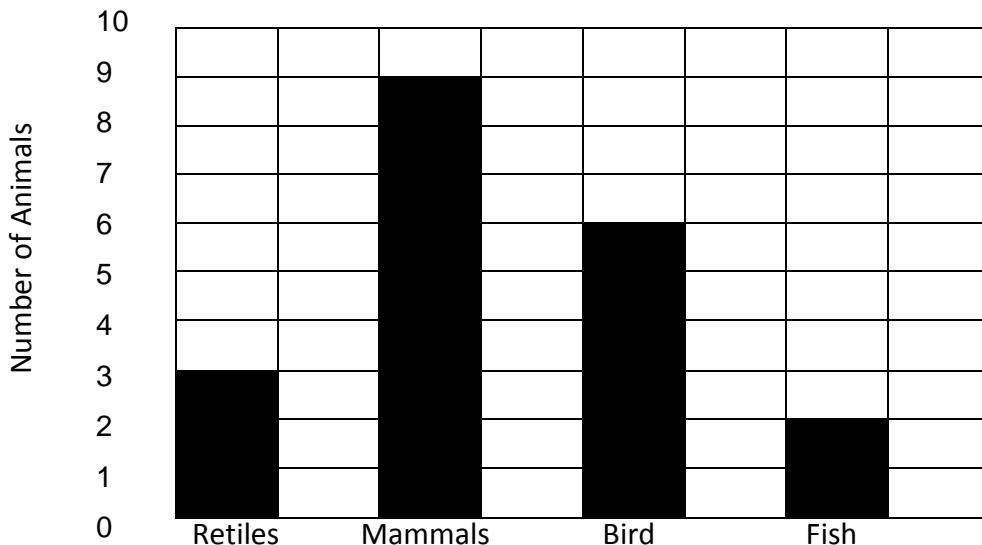
**Sample answers are based on grouping by classification**

Little Town Zoo Animals

Animal Groups	Number of Animals
Retiles	□ □ □
Mammals	□ □ □ □ □ □ □ □ □
Birds	□ □ □ □ □ □
Fish	□ □

Each □ represents 1 animal

Little Town Zoo Animals



Questions specific to grouping by animal class:

1. Compare the group with the most animals with the group with the least number of animals. Write the equation that shows how you solved the problem.  $9 - 2 = \underline{7}$  or  $2 + \underline{7} = 9$
2. How many animals are in the zoo? 20
3. If 5 animals ran away, how many animals would still be in the zoo? 15 animals would still be in the zoo.  
Write the equation that shows how you solved the problem.  $20 - 5 = \underline{15}$  or  $5 + \underline{15} = 20$
4. What group of animal should the zookeeper get so the zoo would not be so little? Why do you think so? The zookeeper should get reptiles (or fish) because there are enough of the other animals and not enough reptiles (or fish).

## CCSS Mathematics Assessment Task

### Generic Questions:

1. Compare the group with the most animals with the group with the least number of animals. Write the equation that shows how you solved the problem.
2. How many animals are in the zoo?
3. If 5 animals ran away, how many animals would still be in the zoo? Write the equation that shows how you solved the problem.
4. What group of animal should the zookeeper get so the zoo is not so little? Why do you think so?

**Scoring Guide or Rubric:** Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Representing data in a picture graph and a bar graph (2.MD.10)	Graphs contain multiple errors  Data does not match graph	Graphs contain minor errors that do not affect overall representation  Data accurately represented	Graphs are constructed and labeled correctly  Data accurately represented
Interpreting data in a bar graph  *Not stated in the standard, but a necessary skill (2.MD.10)	Student demonstrates little or no understanding of reading the graph	Student demonstrates some understanding of reading the graph	Student demonstrates thorough understanding of reading the graph
Solving simple problems using information presented in a bar graph (2.OA.1)	Student demonstrates little or no understanding of solving problems	Student demonstrates some understanding of solving problems	Student demonstrates understanding of solving problems

**CCSS Mathematics Assessment Task**  
**Little Town Zoo**  
**Grade 2 Mathematics Assessment**

Problem:

Little Town Zoo is too little so the zookeeper wants to add more animals. Help the zookeeper know what kind of animal he should get. Use the data to create a picture graph and a bar graph. After you have completed your graphs, answer the questions that will help the zookeeper.

Represent the zoo data in a picture graph. Don't forget to label all the parts of your graph.

Represent the zoo data in a bar graph. Don't forget to label all the parts of your graph.

# CCSS Mathematics Assessment Task

Use your bar graph to answer the following questions.

5. Compare the group with the most animals with the group with the least number of animals. Write the equation that shows how you solved the problem.
  
  6. How many animals are in the zoo? \_\_\_\_\_  
Show how you solved the problem.
  
  7. If 5 animals ran away, how many animals would still be in the zoo? Write the equation that shows how you solved the problem.
  
  8. What group of animal should the zookeeper get so the zoo is not so little? Why do you think so?

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## CCSS Mathematics Assessment Task

**Scoring Guide or Rubric:** Students can receive a total of 6 points depending on how accurately the data are represented in the two graphs and how accurately the data are interpreted.

To receive 2 points for graphing:

- Picture graphs should include a title, categories, category label, key, and data
- Bar graphs include a title, scale, scale label, categories, category label, and data

**Scoring Guide/Rubric (a score should be awarded for each criterion below)**

Criteria (CCSS code)	0 points	1 Point	2 Point
Representing data in a picture graph and a bar graph (2.MD.10)  *Not stated in the standard, but a necessary skill (2.MD.10)	Graphs contain multiple errors  Data does not match graph	Graphs contain minor errors that do not affect overall representation  Data accurately represented	Graphs are constructed and labeled correctly  Data accurately represented
Interpreting data in a bar graph	Student demonstrates little or no understanding of reading the graph	Student demonstrates some understanding of reading the graph	Student demonstrates thorough understanding of reading the graph
Solving simple problems using information presented in a bar graph (2.OA.1)	Student demonstrates little or no understanding of solving problems	Student demonstrates some understanding of solving problems	Student demonstrates understanding of solving problems

**CCSS Mathematics Assessment Task**

Little Town's Zoo Animals

parakeet	lion	monkey	flamingo
fox	rabbit	owl	deer
tiger	catfish	snake	ostrich
penguin	bear	zebra	lizard
alligator	cheetah	parrot	goldfish

## CCSS Mathematics Assessment Task

### Inches and Feet

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Student Materials:

- Ruler
- Pencil

Teacher Materials:

- Inches and Feet assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess student individually, in small groups, or as a whole class.

- Hand out Inches and Feet assessment sheets (one per student).
- Tell the students, "You will be measuring objects around our classroom – first in inches, then in feet. Then you will write to explain why measuring in inches is different than measuring in feet."
- Read the list of objects that students will measure, and show where these objects are around the classroom.
- Tell students "Remember to measure each object twice – once in inches and a second time in feet."
- Have students work independently on task.

Teacher notes: If necessary, place a line of tape on the bigger objects to show students where to measure. Example:



Tape shows students to  
measure the door from the  
left side to the right (not  
top to bottom).

Prompt:

See attachment.

## CCSS Mathematics Assessment Task

Correct or Model Answer:

Answer may look similar to this.

Measurement answers will vary, depending on the size of the objects.

Measuring in inches is different than measuring in feet because an inch is smaller than a foot. Since an inch is smaller, it takes more inches (than feet) to measure something.

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Measure the length of an object (in inches). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest inch.	Accurately measures 3 of the objects to the nearest inch.	Accurately measures all of the objects to the nearest inch.
Measure the length of an object (in feet). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest foot.	Accurately measures 3 of the objects to the nearest foot.	Accurately measures all of the objects to the nearest foot.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more inches than feet). OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Inches and Feet

Directions: Measure the length of each object to the nearest inch. Then measure the length of each object to the nearest foot.

1. Door (from left to right)

\_\_\_\_\_ inches

\_\_\_\_\_ feet

2. Poster

\_\_\_\_\_ inches

\_\_\_\_\_ feet

3. Desk

\_\_\_\_\_ inches

\_\_\_\_\_ feet

4. Folder

\_\_\_\_\_ inches

\_\_\_\_\_ feet

Why is measuring in inches different from measuring in feet?

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## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Measure the length of an object (in inches). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest inch.	Accurately measures 3 of the objects to the nearest inch.	Accurately measures all of the objects to the nearest inch.
Measure the length of an object (in feet). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest foot.	Accurately measures 3 of the objects to the nearest foot.	Accurately measures all of the objects to the nearest foot.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more inches than feet). OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Inches and Feet #2

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Student Materials:

- Inch and Centimeter Ruler
- Pencil

Teacher Materials:

- Centimeters and Inches assessment sheets
- Multiples of: un-sharpened pencils; brand new crayons; unused erasers (big); and index cards  
(This is to ensure that everyone has the same measurement)

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess student individually, in small groups, or as a whole class.

- Hand out Centimeters and Inches assessment sheets (one per student).
- Tell the students, "You will be measuring objects at your desk – first in centimeters, then in inches. Then you will write to explain why measuring in centimeters is different than measuring in inches."
- Provide students with a basket filled with multiples of the objects listed.
- Tell students "Remember to measure each object twice – once in centimeters and a second time in inches."
- Have students work independently on task.

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

Measurement answers will vary, depending on the size of the objects.

Measuring in centimeters is different than measuring in inches because a centimeter is smaller than an inch. Since a centimeter is smaller, it takes more centimeters (than inches) to measure something.

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Measure the length of an object (in centimeters). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest centimeter.	Accurately measures 3 of the objects to the nearest centimeter.	Accurately measures all of the objects to the nearest centimeter.
Measure the length of an object (in inches). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest inch.	Accurately measures 3 of the objects to the nearest inch.	Accurately measures all of the objects to the nearest inch.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more centimeters than inches) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

# CCSS Mathematics Assessment Task

## Inches and Feet #2

Directions: Measure the length of each object to the nearest inch. Then measure the length of each object to the nearest foot.

1. Pencil \_\_\_\_\_ centimeters  
\_\_\_\_\_ inches
  2. Crayon \_\_\_\_\_ centimeters  
\_\_\_\_\_ inches
  3. Eraser \_\_\_\_\_ centimeters  
\_\_\_\_\_ inches
  4. Index card \_\_\_\_\_ centimeters  
\_\_\_\_\_ inches

Why is measuring in centimeters different from measuring in inches?

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Measure the length of an object (in centimeters). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest centimeter.	Accurately measures 3 of the objects to the nearest centimeter.	Accurately measures all of the objects to the nearest centimeter.

### CCSS Mathematics Assessment Task

Measure the length of an object (in inches). (2.MD.2)	Accurately measures 2 or fewer objects to the nearest inch.	Accurately measures 3 of the objects to the nearest inch.	Accurately measures all of the objects to the nearest inch.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more centimeters than inches) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Measure It Twice

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Student Materials:

- Desk
- Inch and Centimeter Ruler
- Pencil

Teacher Materials:

- Measure it Twice assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess student individually, in small groups, or as a whole class.

- Hand out Measure it Twice assessment sheets (one per student)
- Tell students “You will measure the length of your desk from left to right using your ruler. Write how many inches long your desk is. Then, you will measure your desk a second time and write how many centimeters long your desk is.”
- Read part “C” aloud.
- Tell students “Finally you will write whether there were more inches or more centimeters when you measured and explain why.”
- Have students work independently on task

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

- a. My desk is \_\_\_\_\_ inches long.
- b. My desk is \_\_\_\_\_ centimeters long.
- c. When I measured my desk in centimeters, I got a bigger number than when I measured in inches. It took more centimeters to measure my desk because centimeters are smaller than inches – since centimeters are smaller, I need more of them to fill the length of my desk.

Answers will vary depending on desk size.

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Measure the length of an object twice, using length units of different lengths for the two measurements (2.MD.2)	Neither measurement is accurate.	Measurement in either inches or centimeters is accurate.	Measurements in both inches and centimeters are accurate.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more centimeters than inches) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Measure it Twice

Problem:

- a. Measure the length of your desk to the nearest inch.
- b. Measure the length of your desk to the nearest centimeter.
- c. Describe how each measurement is related to the size of its unit.

- a. My desk is \_\_\_\_\_ inches long.
- b. My desk is \_\_\_\_\_ centimeters long.
- c. Why is measuring in centimeters different from measuring in inches?

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#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Measure the length of an object twice, using length units of different lengths for the two measurements (2.MD.2)	Neither measurement is accurate.	Measurement in either inches or centimeters is accurate.	Measurements in both inches and centimeters are accurate.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more centimeters than inches) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Measuring in Inches and Feet

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Measurement and Data

Cluster: Measure and estimate lengths in standard units.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

Student Materials:

- Chart paper
- Ruler
- Pencil

Teacher Materials:

- Measuring in Inches and Feet assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess student individually, in small groups, or as a whole class.

- Hand out Measuring in Inches and Feet assessment sheets (one per student)
- Tell students “You will measure the length of a chart paper using your ruler. Write how many inches long the chart paper is. Then, you will measure the same chart paper a second time and write how many feet long it is.”
- Read part “C” aloud.
- Tell students “Finally you will write why the measurements are different. Don’t forget to include why there was more of one unit than the other.”
- Have students work independently on task

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

- a. The chart paper is \_\_\_\_\_ inches long.
- b. The chart paper is \_\_\_\_\_ feet long.
- c. Measuring in inches is different than measuring in feet because an inch is smaller than a foot. Since an inch is smaller, it takes more inches (than feet) to measure something.

Answers will vary depending on  
chart paper size.

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Measure the length of an object twice, using length units of different lengths for the two measurements. (2.MD.2)	Neither measurement is accurate.	Measurement in either inches or feet is accurate.	Measurements in both inches and feet are accurate.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more inches than feet) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Measuring in Inches and Feet

Problem:

- a. Measure the length of a chart paper to the nearest inch.
- b. Measure the length of the same chart paper to the nearest foot.
- c. Explain why the measurements are different.

- a. The chart paper is \_\_\_\_\_ inches long.
- b. The chart paper is \_\_\_\_\_ feet long.
- c. Explain why measuring in inches is different from measuring in feet.

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#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Measure the length of an object twice, using length units of different lengths for the two measurements. (2.MD.2)	Neither measurement is accurate.	Measurement in either inches or feet is accurate.	Measurements in both inches and feet are accurate.
Describe how the two measurements relate to the size of the unit chosen. (2.MD.2)	Explanation does not answer the question. OR Explanation is not clear.	Explanation only states how the measurements are different (Example: There were more inches than feet) OR Explanation is somewhat clear.	Explanation states how the measurements relate to the size of the unit chosen.

## CCSS Mathematics Assessment Task

### Hannah's Money

Grade Level: 2

Mathematics Domain and Cluster:

Measurement and Data

Work with time and money

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ (dollars) and ¢ (cents) symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

2.NBT.2: Count within a 1000; skip count by 5s, 10s, and 100s.

Student Materials:

"Hannah's Money" Assessment Sheet

Pencil

"Play" money (optional)

Teacher Materials:

None

Directions (for teacher to administer assessment task):

1. Pass out "Hannah's Money" assessment sheet.
2. Have students work independently on the task.

Differentiation options:

Students can use "play" money to manipulate to help students solve the problem

Prompt:

Say: **Hannah was saving her money to buy a gift for her mother. So far she has saved \$2.27. What are three different sets of dollars and cents Hannah could have in her piggybank?**

Possible Correct or Model Answers:

2 dollars      0 quarters      2 dimes      1 nickels      2 pennies

1 dollar      2 quarters      5 dimes      4 nickels      7 pennies

1 dollar      3 quarters      3 dimes      4 nickels      2 pennies

## CCSS Mathematics Assessment Task

Scoring Guide or Rubric: Students can receive a total of 4 points depending on how accurately the monetary amount is represented in 3 ways.

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Representing money value using symbols appropriately (2.MD.8)	<p>One or more representations contain major errors/missing</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain major errors/missing</p>	<p>One representation contains minor errors</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain minor errors</p>	<p>Monetary amount accurately represented in 3 ways</p> <p><u>Amounts</u> and <u>symbols</u> for dollars and cents are accurately labeled in each representation</p>
Adding money values using skip counting (2.NBT.2)	<p>Calculations for each representation are unclear and/or contain major errors/missing</p>	<p>Calculations for each representation are unclear and/or contain minor errors</p>	<p>Calculations for each representation are clear and accurate</p>

**CCSS Mathematics Assessment Task**  
**Money Problems 2**  
**Grade 2 Mathematics Assessment**

Problem:

Hannah was saving her money to buy a gift for her mother. So far she has saved \$2.27. What are three different sets of dollars and cents Hannah could have in her piggybank?

Show your work here.

## CCSS Mathematics Assessment Task

Scoring Guide or Rubric: Students can receive a total of 4 points depending on how accurately the monetary amount is represented in 3 ways.

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Representing money value using symbols appropriately (2.MD.8)	<p>One or more representations contain major errors/missing</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain major errors/missing</p>	<p>One representation contains minor errors</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain minor errors</p>	<p>Monetary amount accurately represented in 3 ways</p> <p><u>Amounts</u> and <u>symbols</u> for dollars and cents are accurately labeled in each representation</p>
Adding money values using skip counting (2.NBT.2)	Calculations for each representation are unclear and/or contain major errors/missing	Calculations for each representation are unclear and/or contain minor errors	Calculations for each representation are clear and accurate

## CCSS Mathematics Assessment Task

### Mari's Money

Grade Level: 2

Mathematics Domain and Cluster:

Measurement and Data

Work with time and money

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.8: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ (dollars) and ¢ (cents) symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

2.NBT.2: Count within a 1000; skip count by 5s, 10s, and 100s.

Student Materials:

"Mari's Money" Assessment Sheet

Pencil

"Play" money (optional)

Teacher Materials:

None

Directions (for teacher to administer assessment task):

1. Pass out "Mari's Money" assessment sheet.
2. Have students work independently on the task.

Differentiation options:

Students can use "play" money to manipulate to help students solve the problem

Prompt:

Mari went to the candy store to buy treats for her friends and came home with \$3.86 in her wallet.

What are two different sets of dollars and cents Mari could have in her wallet?

Possible Correct or Model Answers: 384

\_\_\_\_\_ 3 dollars    \_\_\_\_\_ 3 quarters    \_\_\_\_\_ 0 dimes    \_\_\_\_\_ 1 nickels    \_\_\_\_\_ 4 pennies

\_\_\_\_\_ 2 dollars    \_\_\_\_\_ 6 quarters    \_\_\_\_\_ 2 dimes    \_\_\_\_\_ 2 nickels    \_\_\_\_\_ 4 pennies

## CCSS Mathematics Assessment Task

Scoring Guide or Rubric: Students can receive a total of 4 points depending on how accurately the monetary amount is represented in 2 ways.

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Representing money value using symbols appropriately. (2.MD.8)	<p>One or both representations contain major errors/missing</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain major errors/missing</p>	<p>One representation contains minor errors</p> <p>Labels for <u>amounts</u> and <u>symbols</u> for dollars and cents contain minor errors</p>	<p>Monetary amount accurately represented in 2 ways</p> <p><u>Amounts</u> and <u>symbols</u> for dollars and cents are accurately labeled in each representation</p>
Adding money values using skip counting. (2.NBT.2)	Calculations for each representation are unclear and/or contain major errors/missing	Calculations for each representation are unclear and/or contain minor errors	Calculations for each representation are clear and accurate

**CCSS Mathematics Assessment Task**

**Mari's Money**

**Grade 2 Mathematics Assessment**

Problem:

Mari went to the candy store to buy treats for her friends and came home with \$3.84 in her wallet. What are two different sets of dollars and cents Mari could have in her wallet?

dollars     quarters     dimes     nickels     pennies

Show your work here.

dollars     quarters     dimes     nickels     pennies

Show your work here.

**CCSS Mathematics Assessment Task**

## CCSS Mathematics Assessment Task

### Keys

Grade Level: 2

Mathematics Domain and Cluster: Measurement and Data  
Represent and interpret data

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.MD.9: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units

2.MD.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes

Student Materials:

Keys Measurement Assessment sheet

Keys Line Plot Assessment sheet

Rulers (inch/centimeter), yardsticks, meter sticks, and measuring tapes

Pencils

Teacher Materials: none

Directions (for teacher to administer assessment task):

1. Pass out “Keys Measurement Assessment” sheets.
2. Have students independently choose an appropriate tool to measure each key and record the measurements in the spaces provided. Remind students that they should only use one type of measurement; ie., only inches or only centimeters, not both
3. Check student sheets errors in measurement prior to having them make the line plots. Note students who have difficulty with the measurement portion of the task for marking on Scoring Guide/Rubric later.
4. Pass out “Key Line Plot Assessment” sheets.
5. Have students independently represent their data in the line plot on the assessment sheet then write two generalizations to demonstrate their understanding of the data.

Differentiation option: Small group administration for students who need assistance in reading the problem or understanding the task.

Teacher Note:

- Measurement standards should have been taught previously to this assessment.
- Teacher should check students’ measurements on the “Keys Measurement Assessment” sheets before students create their line plots since errors in measurement will affect their line plots.

Prompt:

Say: **Mr. Smith, the school custodian, found a box full of mixed-up keys. Help him organize the keys into groups.**

Say: **First, measure the keys to the nearest inch or centimeter and record the lengths in the space next to each key.**

Say: **Next, use your measurements to create a LINE PLOT. Include all the features of a line plot. Then, write 2 generalizations about the data.**

### CCSS Mathematics Assessment Task

Correct or Model Answer:

**Measure the keys to the nearest inch or centimeter and record the measurements next to each key.**

<b>Key</b>	<b>Length</b>
	4 in or 10 cm
	1 in or 2 cm
	5 in or 12 cm
	6 in or 15 cm
	5 in or 12 cm
	4 in or 10 cm
	6 in or 15 cm
	5 in or 12 cm
	4 in or 10 cm
	5 in or 12 cm
	4 in or 10 cm
	5 in or 12 cm

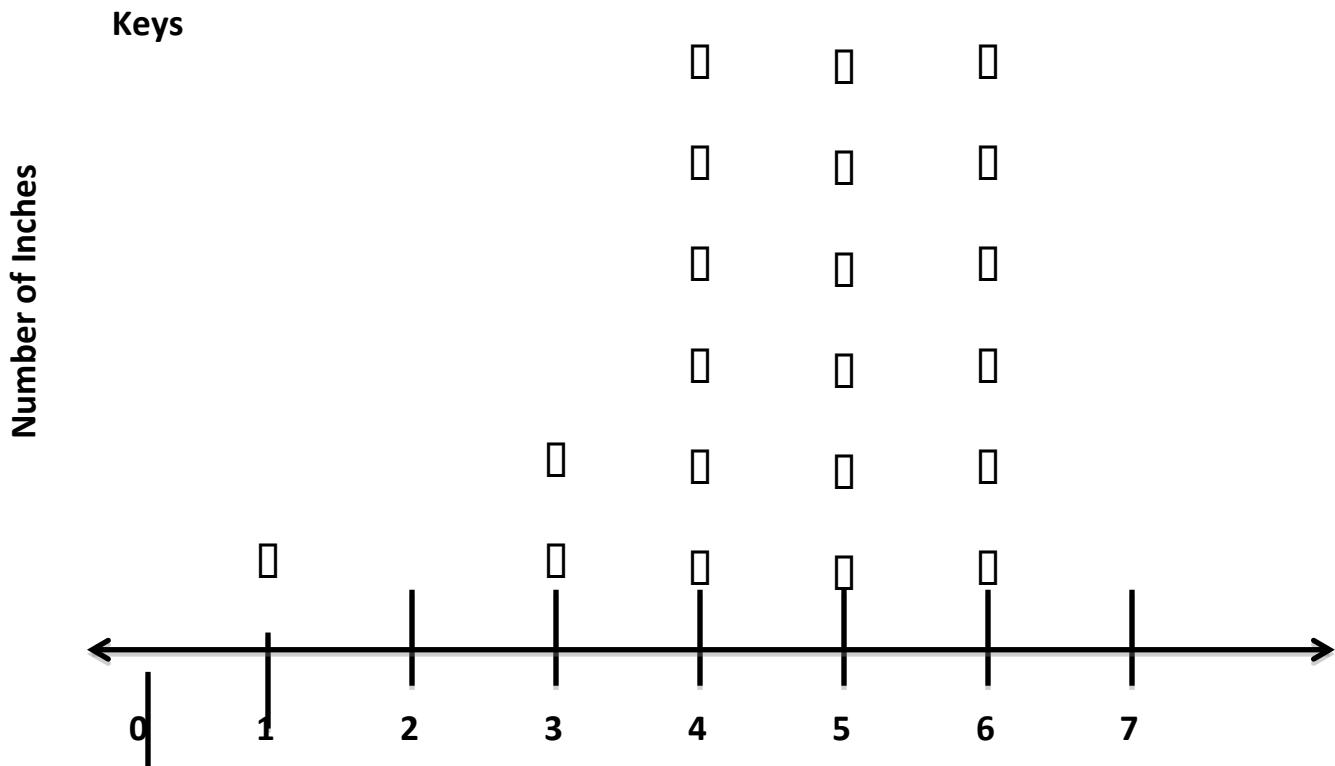
CCSS Mathematics Assessment Task

	6 in or 15 cm
	5 in or 12 cm
	4 in or 10 cm
	6 in or 15 cm
	3 in or 7 cm
	5 in or 12 cm
	6 in or 15 cm
	3 in or 7 cm
	6 in or 15 cm
	4 in or 10 cm

I used a answers may vary to measure the keys because reason should be sensible and support the choice of tool.

### CCSS Mathematics Assessment Task

**Use your measurements to create a LINE PLOT. Include all the features of a line plot.**



#### **Number of Keys**

**Possible example of a generalization:** Most of the keys are 4, 5, or 6 inches long. 19 keys are 4, 5, or 6 inches long, but only 3 keys are 1 or 3 inches long.

**Scoring Guide or Rubric:** Students can receive a total of 6 points depending on their ability to select and use the appropriate tool to accurately measure the keys, accurately and completely represent the data in the line plot, and accurately and completely interpret the data in the line plot in their generalizations.

#### **Scoring Guide/Rubric (a score should be awarded for each criterion below)**

Criteria (CCSS code)	0 points	1 Point	2 Point
<u>Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</u> (2.MD.1)	Student was unable to select and use the appropriate measurement tool	Student was able to select the appropriate measurement tool  Student needed assistance in using the tool appropriately	Student was able to select and use the appropriate measurement tool independently
<u>Generate measurement data by measuring lengths of several objects to the nearest</u>	Line plot contains multiple errors	Line plot contains minor errors that do not affect overall representation	Line plot is constructed and labeled correctly

## CCSS Mathematics Assessment Task

<p><u>whole unit</u>, or by making repeated measurements of the same object. <u>Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</u> (2.MD.9)</p>	<p>Data not accurately represented</p>	<p>Data accurately represented</p>	<p>Data accurately represented</p>
<p><u>Generate measurement data by measuring lengths of several objects to the nearest whole unit</u>, or by making repeated measurements of the same object. <u>Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units</u> (2.MD.9)</p>	<p>Student demonstrates little or no understanding of forming generalizations from a line plot</p>	<p>Student demonstrates some understanding of forming generalizations from a line plot  Data to support generalizations is missing</p>	<p>Student demonstrates thorough understanding of forming generalizations from a line plot  Included data to support generalizations</p>

## CCSS Mathematics Assessment Task

### Mixed-Up Keys Grade 2 Mathematics Assessment

Problem:

Mr. Smith, the school custodian, found a box full of mixed-up keys. Help him put the keys into groups. First, measure the keys to the nearest inch or centimeter. Record the lengths in the space next to each key.

Next, use your measurements to create a LINE PLOT. Include all the features of a line plot. Then, write 2 generalizations about the data.

**Measure the keys to the nearest inch or centimeter and record the measurements next to each key.**

Key	Length
	
	
	
	
	
	
	
	
	

CCSS Mathematics Assessment Task



**CCSS Mathematics Assessment Task**



I used a \_\_\_\_\_ to measure the keys because \_\_\_\_\_

**Use your measurements to create a LINE PLOT. Include all the features of a line plot.**



**CCSS Mathematics Assessment Task**

**Write 2 generalizations about the data in your line plot. Include the data in your answers to support your generalizations.**

1. \_\_\_\_\_

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2. \_\_\_\_\_

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## CCSS Mathematics Assessment Task

### Number Names

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

a. 100 can be thought of as a bundle of ten tens – called a “hundred.”

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil

Teacher Materials:

- none

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Number Names assessment sheets (one per student)
- Tell students “Look at the bold number at the top of the first box. You will show this number in different ways.”
- As you point to each part of the prompt (base-ten drawing, place value, etc.), say, “You will draw the base-ten picture; write how many hundreds, tens, and ones there are; write the number in expanded form; and write the number using words.”
- Then say, “You will do the same for two more numbers.”
- Have students work independently on task.

*Teacher note:* Teach vocabulary words – “number name” and “expanded form.”

*Differentiation option:* If needed, provide base-ten blocks.

Prompt:

See attachment.

## CCSS Mathematics Assessment Task

Correct or Model Answer:

Answer may look similar to this.

Write the numeral: 213

Base-Ten Drawing ( $\square$ = hundred     $|$  = ten     $\bullet$  = one) :



Place value:	Hundreds	Tens	Ones
	2	1	3

Expanded form: **200 + 10 + 3 = 213**

Number name: two-hundred thirteen

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (base-ten drawing). (2.NBT.1)	The base-ten drawings for one or none of the numbers are correct.	The base-ten drawings for two of the numbers are correct.	The base-ten drawings for each of the three numbers are correct.
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (place-value chart). (2.NBT.1)	The place-value charts for one or none of the numbers are correct.	The place-value charts for two of the numbers are correct.	The place-value charts for each of the three numbers are correct.
Read and write numbers to 1000 using base-ten numerals. (2.NBT.3)	The written numerals for none of the given numbers (not including the numeral 570) are correct.	The written numeral for one of the given numbers (not including the numeral 570) is correct.	The written numerals for two of the given numbers (not including the numeral 570) are correct.
Read and write numbers to 1000 using expanded form. (2.NBT.3)	The expanded forms for none of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) are correct.	The expanded form for one of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) is correct.	The expanded forms for two of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) are correct.
Read and write numbers to 1000 using number names. (2.NBT.3)	The number names for none of the given numbers (not including the number name nine-hundred six) are correct.	The number name for one of the given numbers (not including the number name nine-hundred six) is correct.	The number names for two of the given numbers (not including the number name nine-hundred six) are correct.

## CCSS Mathematics Assessment Task

### Number Names

Draw and write the number **570** in different ways.

Base-Ten Drawing

Place value:

Hundreds	Tens	Ones

Expanded form: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

Number name: \_\_\_\_\_

Draw and write the number **nine-hundred six** in different ways.

Numerical: \_\_\_\_\_

Base-Ten Drawing

Place value:

Hundreds	Tens	Ones

Expanded form: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

## CCSS Mathematics Assessment Task

Draw and write the number **200 + 10 + 3** in different ways.

Numeral: \_\_\_\_\_

Base-Ten Drawing

Place value:

Hundreds	Tens	Ones

Number name: \_\_\_\_\_

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (base-ten drawing). (2.NBT.1)	The base-ten drawings for one or none of the numbers are correct.	The base-ten drawings for two of the numbers are correct.	The base-ten drawings for each of the three numbers are correct.
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (place-value chart). (2.NBT.1)	The place-value charts for one or none of the numbers are correct.	The place-value charts for two of the numbers are correct.	The place-value charts for each of the three numbers are correct.
Read and write numbers to 1000 using base-ten numerals. (2.NBT.3)	The written numerals for none of the given numbers (not including the numeral 570) are correct.	The written numeral for one of the given numbers (not including the numeral 570) is correct.	The written numerals for two of the given numbers (not including the numeral 570) are correct.
Read and write numbers to 1000 using expanded form. (2.NBT.3)	The expanded forms for none of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) are correct.	The expanded form for one of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) is correct.	The expanded forms for two of the given numbers (not including the expanded form $200 + 10 + 3 = 213$ ) are correct.
Read and write numbers to 1000 using number names. (2.NBT.3)	The number names for none of the given numbers (not including the number name nine-hundred six) are correct.	The number name for one of the given numbers (not including the number name nine-hundred six) is correct.	The number names for two of the given numbers (not including the number name nine-hundred six) are correct.

**CCSS Mathematics Assessment Task**

## CCSS Mathematics Assessment Task

### Number Poster

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

- a. 100 can be thought of as a bundle of ten tens – called a “hundred.”
- b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil
- Scissors
- Glue

Teacher Materials:

- Number Poster assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Number Poster assessment sheets (one per student)
- Tell students “You will choose a number that is between 200 and 600. Then you will write to show your number in different ways.”
- As you point to each part of the prompt (base-ten picture, place value, etc.), say, “You will use this sheet (hold up the sheet with blocks) to cut out a base-ten picture of your number. Glue the base-ten picture below your number. Then, write how many hundreds, tens, and ones there are in your number; write it in expanded form; and, finally, write your number using words.”
- Have students work independently on task.

*Teacher notes:*

- Teach vocabulary words – “number name” and “expanded form.”
- Option: Have students draw the number instead of cutting it out.

*Differentiation option:* If needed, provide base-ten blocks.

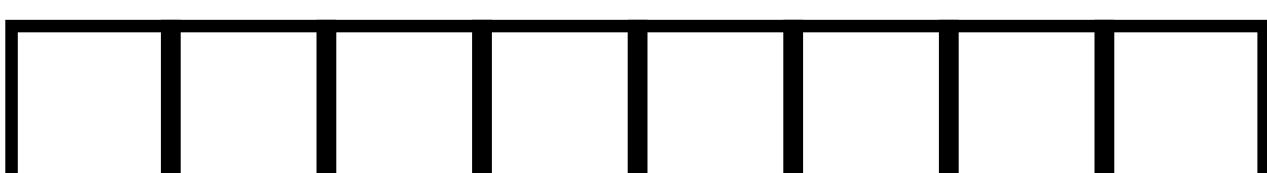
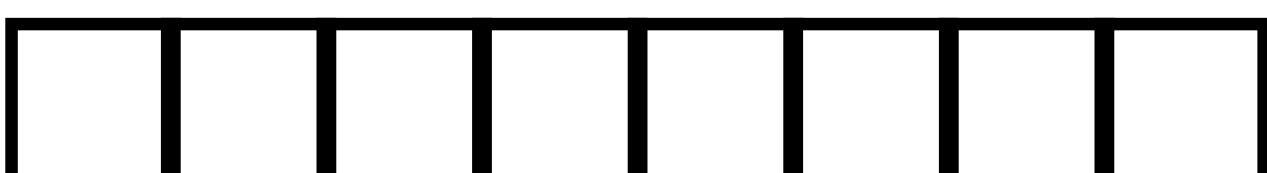
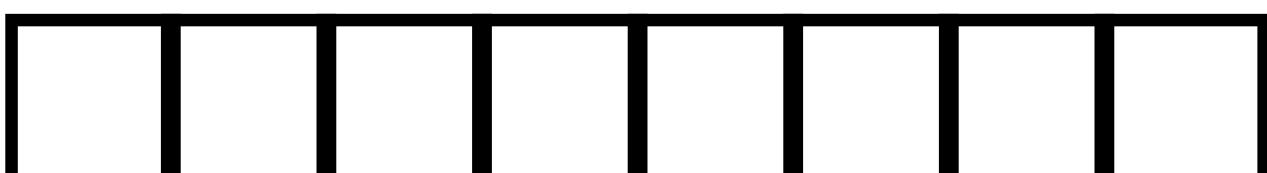
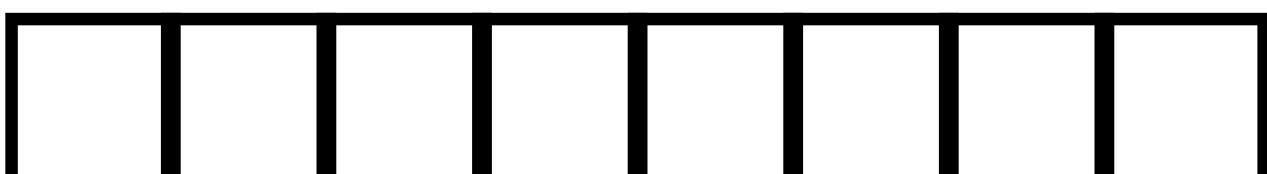
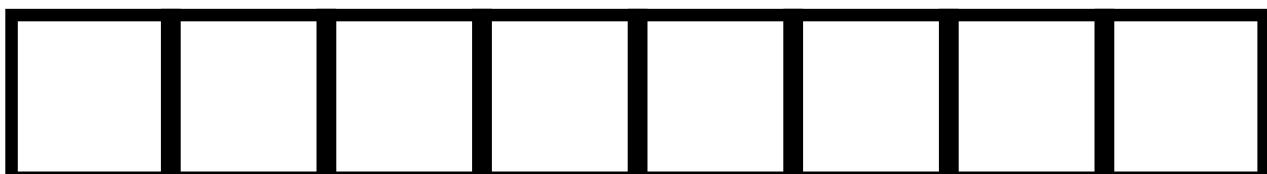
Prompt:

See attachment.

### CCSS Mathematics Assessment Task

Correct or Model Answer:  
Answer may look similar to this.

4	1	5
---	---	---



## CCSS Mathematics Assessment Task



Place value:

	Hundreds	Tens	Ones
	4	1	5

Expanded form:  $400 + 10 + 5 = 415$

Number name: Four-hundred fifteen

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. (2.NBT.1)	Neither the picture nor the place value chart matches the 3-digit number.	Either the picture OR the place value chart match the 3-digit number.	The picture and place value chart both match the 3-digit number.
Write numbers to 1000 using base-ten numerals, number names, and expanded form. (2.NBT.3)	Neither the expanded form nor the number name matches the 3-digit number.	Either the expanded form OR the number name match the 3-digit number.	The expanded form and number name match the 3-digit number.

## CCSS Mathematics Assessment Task

### Number Poster

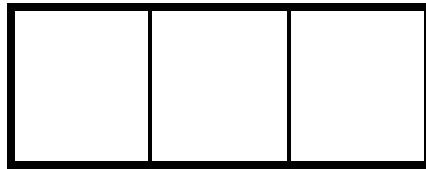
Problem:

Use the number cards to make a three digit number that is between 200 and 600.

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

## CCSS Mathematics Assessment Task

Glue your number into the box.



Use the Base-Ten Blocks sheet to cut out a base-ten picture of your number, and glue it into the space below.

Place value:

Hundreds	Tens	Ones

Expanded form: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

Number name: \_\_\_\_\_

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. (2.NBT.1)	Neither the picture nor the place value chart matches the 3-digit number.	Either the picture OR the place value chart match the 3-digit number.	The picture and place value chart both match the 3-digit number.
Write numbers to 1000 using base-ten numerals, number names, and expanded form. (2.NBT.3)	Neither the expanded form nor the number name matches the 3-digit number.	Either the expanded form OR the number name match the 3-digit number.	The expanded form and number name match the 3-digit number.

## CCSS Mathematics Assessment Task

### The Biggest Number

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

- a. 100 can be thought of as a bundle of ten tens – called a “hundred.”
- b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil

Teacher Materials:

- The Biggest Number assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out The Biggest Number assessment sheets (one per student)
- Tell students “Look at the digits 2, 4, and 7 at the top of the page. You will make the biggest three-digit number that you can, using those three digits. Finally, you will explain your thinking.”
- Read the prompt aloud to students at least two times.
- Have students work independently on task.

*Differentiation options:*

If needed...

- Provide base-ten blocks
- Allow students to cut out and manipulate the digits.

Prompt:

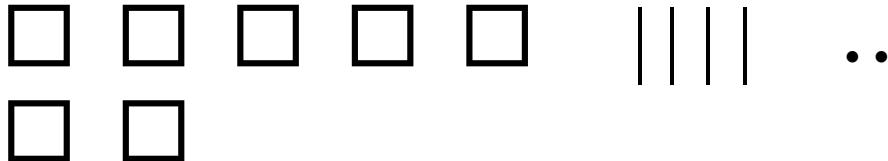
See attachment.

## CCSS Mathematics Assessment Task

Correct or Model Answer:

Answer may look similar to this.

742



This is the biggest number because it has 7 hundreds (which is more than either 4 or 2 hundreds). Since I used the 7 for the hundreds place, I had the digits 4 and 2 left. For the tens place, I used the digit 4 because 4 tens (40) is bigger than 2 tens (20). Then I put the 2 in the ones place. So, my number was  $700 + 40 + 2$ , or 742.

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. (2.NBT.1)	The three-digit number is not the biggest number that can be made, and the largest digit is NOT in the hundreds place. AND The explanation does not state the value of each digit.	The three-digit number is not the biggest number that can be made, <b>but</b> the largest digit <i>is</i> in the hundreds place. AND/OR The explanation does not clearly state the value of each digit and/or why it is the biggest number.	The three-digit number is the biggest number that can be made using the digits 2, 4, and 7. AND The explanation clearly states the value of each digit (in terms of hundreds, tens, and ones) and why it is the biggest number.
Read and write numbers to 1000 using base-ten numerals. (2.NBT.3)			

## CCSS Mathematics Assessment Task

### The Biggest Number

2	4	7
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Directions: Use the three digits above to make the biggest three-digit number possible (each of the digits may only be used once). Write your number on the line below. Explain how you know it is the biggest number you could make.

The biggest three-digit number I can make is: \_\_\_\_\_

I know it's the biggest number because: \_\_\_\_\_

(Space for drawing, if needed)

#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. (2.NBT.1)	The three-digit number is not the biggest number that can be made, and the largest digit is NOT in the hundreds place. AND The explanation does not state the value of each digit.	The three-digit number is not the biggest number that can be made, <b>but</b> the largest digit <i>is</i> in the hundreds place. AND/OR The explanation does not clearly state the value of each digit and/or why it is the biggest number.	The three-digit number is the biggest number that can be made using the digits 2, 4, and 7. AND The explanation clearly states the value of each digit (in terms of hundreds, tens, and ones) and why it is the biggest number.
Read and write numbers to 1000 using base-ten numerals. (2.NBT.3)			

## CCSS Mathematics Assessment Task

Make 185

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

a. 100 can be thought of as a bundle of ten tens – called a “hundred.”

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil

Teacher Materials:

- Make 185 assessment sheets

Directions (for teacher to administer assessment task):

- Hand out Make 185 assessment sheets (one per student)
- Tell students “You will show the number 185 using a base-ten drawing. In part B, you will show the number 185 using only tens and ones.”
- Read each prompt aloud to students at least two times.
- Remind the students, “Remember, in part B, you may only use tens and ones to show the number.”
- Have students work independently on task.

Prompt:

See attachment.

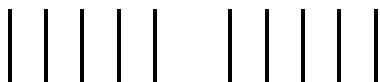
Correct or Model Answer:

Answer may look similar to this.

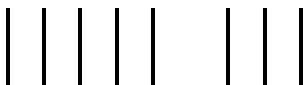
(□= hundred    | = ten    • = one)



1 hundred 8 tens 5 ones



## CCSS Mathematics Assessment Task

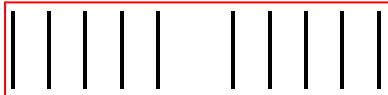


• • • •

18 tens 5 ones

18 tens 5 ones shows the number 185 because 18 tens can be split into 10 tens and 8 tens, and 10 tens is the same as 1 hundred. 1 hundred, 8 tens, and 5 ones is the same as 185.

10 20 30 40 50      60 70 80 90 100



= 1 hundred



8 tens

• • • •

5 ones

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	Some or none of the base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (2 or less).	Most of the base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (3 out of 4).	The base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (4 out of 4).
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	There is no explanation OR explanation is not clear.	Explanation is somewhat clear.	Explanation is clear and refers to the idea that 10 tens is equivalent to one hundred.
Writes numerals using base-ten system. (2.NBT.3)	Unable to write numerals by using the base-ten system.	Writes numerals by using the base-ten system with some errors.	Writes numerals accurately by using the base-ten system.

**CCSS Mathematics Assessment Task**

**Make 185**

**Grade 2 Mathematics Assessment**

Problem:

- A. Draw base-ten blocks to show the number 185.

Hundreds	Tens	Ones

Write the amount of hundreds, tens, and ones you drew.

\_\_\_\_\_ hundreds    \_\_\_\_\_ tens    \_\_\_\_\_ ones

- B. Can you make the number 185 without using any hundreds blocks? Draw the base-ten blocks to show how.

Tens	Ones

Write the amount of tens and ones you drew.

\_\_\_\_\_ tens    \_\_\_\_\_ ones

- C. Look at the amounts of hundreds, tens, and ones you wrote for part A.

Now look at the amount of tens and ones you wrote for part B.

Explain why they both show the number 185.

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## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	Some or none of the base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (2 or less).	Most of the base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (3 out of 4).	The base-ten drawings and written amounts of hundreds, tens, and ones are correct for parts A and B (4 out of 4).
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	There is no explanation OR explanation is not clear.	Explanation is somewhat clear.	Explanation is clear and refers to the idea that 10 tens is equivalent to one hundred.
Writes numerals using base-ten system. (2.NBT.3)	Unable to write numerals by using the base-ten system.	Writes numerals by using the base-ten system with some errors.	Writes numerals accurately by using the base-ten system.

## CCSS Mathematics Assessment Task

### Sam and Dave's Argument

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

a. 100 can be thought of as a bundle of ten tens – called a “hundred.”

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil

Teacher Materials:

- Sam and Dave's Argument assessment sheets

Directions (for teacher to administer assessment task):

- Hand out Sam and Dave's Argument assessment sheets (one per student)
- Tell students “You will need to solve the argument between Sam and Dave, and support your answer using both a picture and writing.”
- Read the prompt aloud to students at least two times.
- Remind the students, “Don’t forget to draw a picture and write to support your answer.”
- Have students work independently on task.

Prompt:

See attachment.

# CCSS Mathematics Assessment Task

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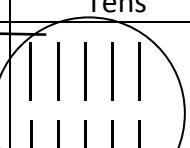
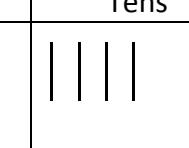
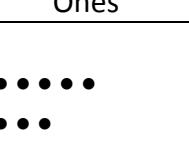
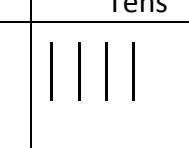
### Correct or Model Answer:

Answer may look similar to this.

Sam's number: 348

Dave's number: 348

No, Dave is not correct because both he and Sam grabbed the same number – 348.

Sam's number – 2 hundreds, 14 tens, 8 ones			Dave's number – 3 hundreds, 4 tens, 8 ones		
Hundreds	Tens	Ones	Hundreds	Tens	Ones
<input type="text"/> 100  <input type="text"/> 200	 14 tens   4 tens	8 ones   8 ones	<input type="text"/> 300	 4 tens	8 ones   8 ones

The 14 tens in Sam's number is the same as 1 hundred and 4 tens because ten tens is equal to one hundred. So, both Sam and Dave have the number 348.

**Scoring Guide/Rubric** (a score should be awarded for each criterion below)

<b>Criteria (CCSS code)</b>	<b>0 points</b>	<b>1 Point</b>	<b>2 Point</b>
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	Answer is inaccurate.	Answer is accurate.  The drawing or writing does NOT show the understanding that 10 tens can be thought of 1 hundred.	Answer is accurate.  The drawing or writing shows the understanding that 10 tens can be thought of 1 hundred.
Read and write numbers to 1000 using base-ten numerals (2.NBT.3)	<b>Neither</b> number matches the amount of hundreds, tens, and ones Sam and Dave grabbed.	<b>Either</b> the number written Sam OR Dave matches the amounts of hundreds, tens, and ones he grabbed.	The numbers written for <b>both</b> Sam and Dave match the amounts of hundreds, tens, and ones they grabbed.

## CCSS Mathematics Assessment Task

### Sam and Dave's Argument

Problem:

The students in Ms. Kelly's class were asked to grab handfuls of base-ten blocks and compare the number they grabbed with their partner's number. These are the amounts of blocks Sam and his partner, Dave, grabbed:

Sam grabbed

Hundreds	Tens	Ones
2	14	8

Dave grabbed

Hundreds	Tens	Ones
3	4	8

Dave said that his number was bigger than Sam's because he had 3 hundreds, and Sam only had 2 hundreds. Is Dave correct? Explain your thinking.

**Draw and label** Sam's base-ten blocks

Hundreds	Tens	Ones
2	14	8

**Draw and label** Dave's base-ten blocks

Hundreds	Tens	Ones
3	4	8

Sam's number \_\_\_\_\_

Dave's number \_\_\_\_\_

Is Dave correct? Explain why or why not.

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## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	Answer is inaccurate.	Answer is accurate.  The drawing or writing does NOT show the understanding that 10 tens can be thought of 1 hundred.	Answer is accurate.  The drawing or writing shows the understanding that 10 tens can be thought of 1 hundred.
Read and write numbers to 1000 using base-ten numerals (2.NBT.3)	<b>Neither</b> number matches the amount of hundreds, tens, and ones Sam and Dave grabbed.	<b>Either</b> the number written Sam OR Dave matches the amounts of hundreds, tens, and ones he grabbed.	The numbers written for <b>both</b> Sam and Dave match the amounts of hundreds, tens, and ones they grabbed.

## CCSS Mathematics Assessment Task

### Ways to Make 143

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

a. 100 can be thought of as a bundle of ten tens – called a “hundred.”

b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Student Materials:

- Pencil

Teacher Materials:

- Ways to Make 143 assessment sheets

Directions (for teacher to administer assessment task):

- Hand out Ways to Make 143 assessment sheets (one per student)
- Tell students “You will write different combinations of hundreds, tens, and ones to make the number 143. Each combination you make for part “A” must include one hundred. Then you will need to explain how you know that you’ve found all possible solutions.”
- Read the prompt aloud to students at least two times.
- Remind the students, “Don’t forget that each combination of hundreds, tens, and ones you make for part “A” must include one hundred.”
- Have students work independently on task.

*Differentiation option:* Provide base-ten blocks or encourage students to draw a base-ten picture as needed.

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

- a. List of all the ways, using 1 hundred, to make 143.

1 hundred, 4 tens, 3 ones

1 hundred, 3 tens, 13 ones

1 hundred, 2 tens, 23 ones

1 hundred, 1 tens, 33 ones

1 hundred, 0 tens, 43 ones

Explain how you know that you’ve found all the possible ways.

I know that I’ve found all the possible ways because I started with 1 hundred, 4 tens, and 3 ones (which is

## CCSS Mathematics Assessment Task

the easiest/fastest way to show the number 143), then I kept trading 1 ten for 10 ones until there were no tens left.

- b. Two ways to make 143 using only tens and ones.

14 tens and 3 ones

13 tens and 13 ones

12 tens and 23 ones

11 tens and 33 ones

10 tens and 43 ones

9 tens and 53 ones

8 tens and 63 ones

7 tens and 73 ones

6 tens and 83 ones

5 tens and 93 ones

4 tens and 103 ones

3 tens and 113 ones

2 tens and 123 ones

1 tens and 133 ones

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.1)	The number 143 is represented in 2 or less different and correct ways with hundreds, tens, and ones OR there are major errors.	The number 143 is represented in 3-4 different and accurate ways with hundreds, tens, and ones OR there are minor errors.	The number 143 is represented in 5 different and accurate ways with hundreds, tens, and ones.
Read and write numbers to 1000 using base-ten numerals 100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.3)			
100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)	There is no explanation OR explanation is not clear.	Explanation is somewhat clear.	Explanation is clear and refers to the idea that one ten can be exchanged for ten ones.
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.1)	Neither representation of the number 143 using tens and ones is correct.	The number 143 is represented in one correct way with tens and ones.	The number 143 is represented in two different and correct ways with tens and ones.
Read and write numbers to 1000 using base-ten numerals 100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.3)			

## CCSS Mathematics Assessment Task

### Ways to Make 143

**Problem:**

- a. Write different combinations of hundreds, tens, and ones to make the number 143. Each combination must include at least one hundred. Explain how you know you've found all the possible ways.
  
- b. Using only tens and ones, find and write down two ways to make 143.

- a. List of all the ways, using 1 hundred, to make 143.

Hundreds	Tens	Ones

Explain how you know that you've found all the possible ways.

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- b. Two ways to make 143 using only tens and ones.

Tens	Ones

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
<p>Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.1)</p> <p>Read and write numbers to 1000 using base-ten numerals 100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.3)</p>	<p>The number 143 is represented in 2 or less different and correct ways with hundreds, tens, and ones OR there are major errors.</p>	<p>The number 143 is represented in 3 different and correct ways with hundreds, tens, and ones OR there are minor errors.</p>	<p>The number 143 is represented in 4-5 different and correct ways with hundreds, tens, and ones.</p>
<p>100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.1a)</p>	<p>There is no explanation OR explanation is not clear.</p>	<p>Explanation is somewhat clear.</p>	<p>Explanation is clear and refers to the idea that one ten can be exchanged for ten ones.</p>
<p>Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g. 706 equals 7 hundreds, 0 tens, and 6 ones. (2.NBT.1)</p> <p>Read and write numbers to 1000 using base-ten numerals 100 can be thought of as a bundle of ten tens – called a “hundred.” (2.NBT.3)</p>	<p>Neither representation of the number 143 using tens and ones is correct.</p>	<p>The number 143 is represented in one correct way with tens and ones.</p>	<p>The number 143 is represented in two different and correct ways with tens and ones.</p>

## CCSS Mathematics Assessment Task

### Kate's Money

Grade Level: 2

Mathematics Domain and Cluster:

Domains: Numbers and Operations in Base-Ten; Measurement and Data

Clusters: Understand place value; Work with time and money

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.2 Count within 1000; skip count by 5s, 10s, and 100s.

2.MD.8 Solve word problems involving bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

Student Materials:

- Pencil
- Coins (optional)

Teacher Materials:

- Kate's Money assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Kate's Money assessment sheets (one per student)
- Tell students, "You will need to draw a picture of the problem and label to show how you figured out the answer. Then, you will write the answer with the dollar symbol in the appropriate place."
- Read the prompts aloud to students at least two times.
- Remind the students, "Remember to draw a picture of the problem and label to show how you counted. Then write the answer with the dollar symbol in the appropriate place."
- Have students work independently on task.

*Differentiation option:* If needed, students may use coins to help them solve.

Prompt:

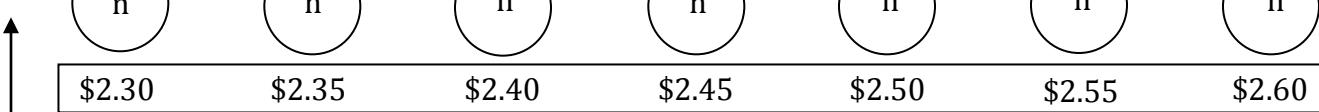
See attachment.

Correct or Model Answer:

Answer may look similar to this.

Part A

\$2.25

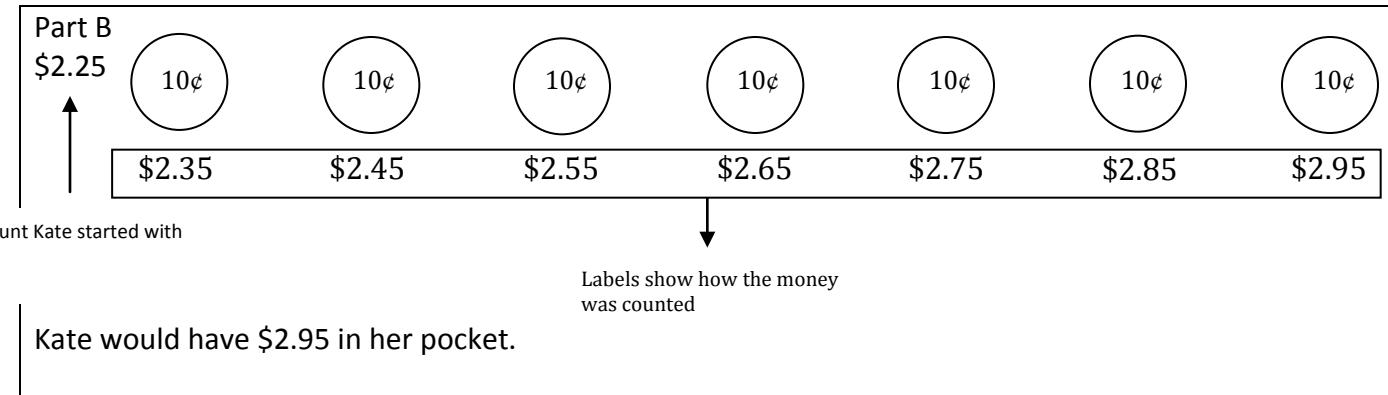


Amount Kate started with

Labels show how the money  
was counted

Kate has \$2.60 in her pocket.

## CCSS Mathematics Assessment Task



### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Skip count by 5s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s.
Skip count by 10s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 10s.
Solve word problems involving nickels and dimes using the \$ symbol appropriately. (2.MD.8)	\$ symbol missing or not in the appropriate place for both answers.	\$ symbol missing or not in the appropriate place for either part A OR part B.	\$ symbol in the appropriate place for both answers.

## CCSS Mathematics Assessment Task

### Kate's Money

**Problem A:**

Kate has \$2.25 in her pocket. As she is walking to school, she finds 7 nickels on the ground. She picks them up and adds them to the money in her pocket. How much money does Kate now have?

Draw and label a picture to show how you counted the money.

Kate has \_\_\_\_\_ in her pocket.

**Problem B:**

Think back to how much money Kate started with in her pocket (\$2.25). What if she had found 7 dimes instead of 7 nickels? How much money would she have in her pocket then?

Draw and label a picture to show how you counted the money.

Kate would have \_\_\_\_\_ in her pocket.

**Scoring Guide/Rubric** (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Skip count by 5s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s.

### CCSS Mathematics Assessment Task

Skip count by 10s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 10s.
Solve word problems involving nickels and dimes using the \$ symbol appropriately. (2.MD.8)	\$ symbol missing or not in the appropriate place for both answers.	\$ symbol missing or not in the appropriate place for either part A OR part B.	\$ symbol in the appropriate place for both answers.

## CCSS Mathematics Assessment Task

### Number Chart Patterns

Grade Level: 2
Mathematics Domain and Cluster: Domain: Numbers and Operations in Base-Ten Cluster: Understand place value
Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard): <u>2.NBT.2</u> Count within 1000; skip count by 5s, 10s, and 100s.
Student Materials: <ul style="list-style-type: none"><li>• Pencil</li></ul>
Teacher Materials: <ul style="list-style-type: none"><li>• <u>Number Chart Patterns</u> assessment sheets</li></ul>
Directions (for teacher to administer assessment task): Teacher may choose whether to assess students in small groups or as a whole class. <ul style="list-style-type: none"><li>• Hand out <u>Number Chart Patterns</u> assessment sheets (one per student)</li><li>• Tell students “You will color two different number patterns on this chart – one pattern that counts by fives, and a second pattern that counts by tens.”</li><li>• Read the prompts aloud to students at least two times.</li><li>• Have students work independently on task.</li><li>• Observe strategies students rely on to count/skip count (example: Does the student start at 905 then count on 5? Or do they automatically know that after 905 is 910 when skip-counting by 5s?).</li></ul>
<i>Teacher option:</i> Ask students to describe what they notice about the patterns they colored.
Prompt: See attachment.
Correct or Model Answer: Answer may look similar to this. <ol style="list-style-type: none"><li>1. Skip count by 10s. 908, 918, 928, 938, 948, 958, 968, 978, 988, 998</li><li>2. Skip count by 5s. 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000</li></ol>

#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Skip count by 5s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s.
Skip count by 10s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 10s.

## CCSS Mathematics Assessment Task

### Number Chart Patterns

Problems:

1. Start at 908 and count by tens. Stop at 998. Color this number pattern yellow.
2. Start at 905 and count by fives. Stop at 1000. Color this number pattern blue.

									900
901	902	903	904	905	906	907	908	909	910
911	912	913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928	929	930
931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
951	952	953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	1000

#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Skip count by 5s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s.
Skip count by 10s. (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 10s.

**CCSS Mathematics Assessment Task**

## CCSS Mathematics Assessment Task

### Skip Counting

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.2 Count within 1000; skip count by 5s, 10s, and 100s.

Student Materials:

- none

Teacher Materials:

- Counting Interview sheets

Directions (for teacher to administer assessment task):

Teacher assesses students individually.

- Tell the student “Listen carefully to the directions. I will give you a starting number, then ask you to either count or skip count by 5s, 10s, or 100s until I say “stop.””
- Read the directions to the student.
- Observe strategies students rely on to count/skip count (example: Does the student start at 605 then count on 5? Or do they automatically know that after 605 is 610 when skip-counting by 5s?).

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

1. Start at 100 and skip count by 100s. Stop at 1,000.

**100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000.**

2. Start at 530 and skip count by 10s until I say “stop.” (Allow student to count until at least 640.)

**530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640.**

3. Start at 325 and skip count by 5s until I say “stop.” (Allow student to count until at least 370.)

**325, 330, 335, 340, 345, 350, 355, 360, 365, 370.**

4. Start at 80 and skip count by 5s until I say “stop.” (Allow student to count until at least 125.)

**80, 85, 90, 95, 100, 105, 110, 115, 120, 125.**

5. Start at 198 and count forward by 1s until I say “stop.” (Allow student to count until at least 210.)

**198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210.**

6. Start at 810 and count backwards by 1s until I say “stop.” (Allow student to count back to 800.)

**810, 809, 808, 807, 806, 805, 804, 803, 802, 801.**

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Count within 1000 (2.NBT.2)	Counts both forwards and backwards with significant errors.	Counts either forwards or backwards accurately OR counts with minor errors.	Counts both forwards and backwards accurately.
Skip count by 5s, 10s, and 100s (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s, 10s, and 100s.

## CCSS Mathematics Assessment Task

### Skip Counting

Directions:

1. Start at 100 and skip count by 100s. Stop at 1,000.
2. Start at 530 and skip count by 10s until I say “stop.” (Allow student to count until at least 640.)
3. Start at 325 and skip count by 5s until I say “stop.” (Allow student to count until at least 370.)
4. Start at 80 and skip count by 5s until I say “stop.” (Allow student to count until at least 125.)
5. Start at 198 and count forward by 1s until I say “stop.” (Allow student to count until at least 210.)
6. Start at 810 and count backwards by 1s until I say “stop.” (Allow student to count back to 800.)

#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Count within 1000 (2.NBT.2)	Counts both forwards and backwards with significant errors.	Counts either forwards or backwards accurately OR counts with minor errors.	Counts both forwards and backwards accurately.
Skip count by 5s, 10s, and 100s (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s, 10s, and 100s.

## CCSS Mathematics Assessment Task

### Skip Counting up to 1,000

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Numbers and Operations in Base-Ten

Cluster: Understand place value

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.NBT.2 Count within 1000; skip count by 5s, 10s, and 100s.

Student Materials:

- Pencil

Teacher Materials:

- Skip Counting assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Skip Counting assessment sheets (one per student)
- Tell students "Read each direction carefully. It will tell you whether to count by 1s, 5s, 10s, or 100s to fill in the blank spaces for each number pattern."
- Have students work independently on task.
- Observe strategies students rely on to count/skip count (example: Does the student start at 605 then count on 5? Or do they automatically know that after 605 is 610 when skip-counting by 5s?).

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.

1. Skip count by 100s to fill in the blank spaces.

225,       325,       425,       525,       625,       725,       825

2. Skip count by 10s to fill in the blank spaces.

605,       615,       625,       635,       645,       655,       665

3. Skip count by 10s to fill in the blank spaces.

189,       199,       209,       219,       229,       239,       249

## CCSS Mathematics Assessment Task

4. Skip count by 5s to fill in the blank spaces.

865, 870, 875, 880, 885, 890, 895

5. Count by 1s to fill in the blank spaces.

597, 598, 599, 600, 601, 602, 603

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Count within 1000 (2.NBT.2)	Counts by 1s with significant errors.	Counts by 1s with minor errors.	Counts by 1s accurately.
Skip count by 5s, 10s, and 100s (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s, 10s, and 100s.

## CCSS Mathematics Assessment Task

### Skip Counting up to 1,000

Problems:

1. Skip count by 100s to fill in the blank spaces.

225, \_\_\_\_\_, 425, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 825

2. Skip count by 10s to fill in the blank spaces.

605, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 655, \_\_\_\_\_

3. Skip count by 10s to fill in the blank spaces.

189, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 229, \_\_\_\_\_, \_\_\_\_\_

4. Skip count by 5s to fill in the blank spaces.

865, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 890, \_\_\_\_\_

5. Skip count by 1s to fill in the blank spaces.

\_\_\_\_\_ , 598, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, 603

#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Count within 1000 (2.NBT.2)	Counts by 1s with significant errors.	Counts by 1s with minor errors.	Counts by 1s accurately.
Skip count by 5s, 10s, and 100s (2.NBT.2)	Skip counts or uses other strategies (such as counting on) with significant errors.	Mostly uses other strategies (such as counting on) to complete skip counting number patterns OR skip counts with minor errors.	Skip counts accurately by 5s, 10s, and 100s.

## CCSS Mathematics Assessment Task

### Addition Fluency

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Add and subtract within 20

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

Student Materials:

- Slate board (small whiteboard) – one per student
- Dry erase marker
- Whiteboard eraser or paper towel

If slate boards are not available, students may also use:

- Paper and a marker
- Paper inside of a clear sheet protector and dry erase marker

Teacher Materials:

- Addition Fluency flash cards

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students individually or in small groups.

- Randomly select 10 Addition Fluency flash cards.
- Gather students in an area where they will all be able to see the flash cards.
- Tell students “I will hold up an addition problem. Solve it as quickly as you can. Write your answer on your board (paper, etc.) and hide it until I ask everyone to show their answer.”
- Hold up one card. Give students time to solve and write down their answer.
- Observe how they solve the problems. (example: Does the student frequently use his/her fingers to solve?)
- Ask the students to show their answers.
- Repeat for all 10 cards.

*Teacher option:* Check on the types of addition strategies students are using by asking them to discuss how they solved particular problems.

Prompt:

See attachment.

Correct or Model Answer:

“Fluently” means that a student can solve efficiently and accurately, and is flexible in choosing a method to solve (example: A student may mentally count on when solving  $14 + 2$ ; but uses a doubles method when solving  $14 + 4$  ( $4 + 4 = 8$ , so  $14 + 4 = 18$ )).

## CCSS Mathematics Assessment Task

$10 + 1 = 11$	$10 + 2 = 12$	$10 + 3 = 13$	$10 + 4 = 14$	$10 + 5 = 15$	
$10 + 6 = 16$	$10 + 7 = 17$	$10 + 8 = 18$	$10 + 9 = 19$	$10 + 10 = 20$	
$11 + 1 = 12$	$11 + 2 = 13$	$11 + 3 = 14$	$11 + 4 = 15$	$11 + 5 = 15$	
$11 + 6 = 17$	$11 + 7 = 18$	$11 + 8 = 19$	$11 + 9 = 20$	$12 + 1 = 13$	
$12 + 2 = 14$	$12 + 3 = 15$	$12 + 4 = 16$	$12 + 5 = 17$	$12 + 6 = 18$	
$12 + 7 = 19$	$12 + 8 = 20$	$13 + 1 = 14$	$13 + 2 = 15$	$13 + 3 = 16$	
$13 + 4 = 17$	$13 + 5 = 18$	$13 + 6 = 19$	$13 + 7 = 20$	$14 + 1 = 15$	
$14 + 2 = 16$	$14 + 3 = 17$	$14 + 4 = 18$	$14 + 5 = 19$	$14 + 6 = 20$	
$15 + 1 = 16$	$15 + 2 = 17$	$15 + 3 = 18$	$15 + 4 = 19$	$15 + 5 = 20$	
$16 + 1 = 17$	$16 + 2 = 18$	$16 + 3 = 19$	$16 + 4 = 20$	$17 + 1 = 18$	
$17 + 2 = 19$	$17 + 3 = 20$	$18 + 1 = 19$	$18 + 2 = 20$	$19 + 1 = 20$	

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Fluently add within 20 using mental strategies. (2.OA.2)	<ul style="list-style-type: none"> <li>- Student accurately solves by using mostly non-mental strategies (i.e. counting on with fingers and/or a paper/pencil method)</li> <li>OR</li> <li>- Solves with significant errors.</li> </ul>	<ul style="list-style-type: none"> <li>- Student accurately solves using a mix of mental and non-mental strategies (i.e. counting on with fingers and/or a paper/pencil method)</li> <li>OR</li> <li>- Solves with minor errors.</li> </ul>	<ul style="list-style-type: none"> <li>- Student accurately solves using mental strategies in a reasonable* amount of time.</li> </ul>

\*This assessment can be used throughout the year and a reasonable amount of time would be different depending upon the time of the year that you are assessing the student.

- As we year progresses, students should take less time to figure out the problems. In Quarter 1, students may take up to 5 seconds or so to figure out the sums of two one-digit facts but by the end of the year, students should be taking less time and should be solving the problems much more quickly. Teachers are encouraged to use their own professional judgment.

**CCSS Mathematics Assessment Task**

Addition Fluency Flash Cards

$10$

$+ 1$

$10$

$+ 2$

$10$

$+ 3$

$10$

$+ 4$

$10$

$+ 5$

$10$

$+ 6$

$10$

$+ 7$

$10$

$+ 8$

$10$

$+ 9$

$10$

$+ 10$

$1$

$+ 10$

$2$

$+ 10$

$3$

$+ 10$

$4$

$+ 10$

$5$

$+ 10$

$6$

$+ 10$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 7 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 11 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 5 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 12 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 4 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 13 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 5 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ + 1 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

 $15$  $+ 2$  $15$  $+ 3$  $15$  $+ 4$  $15$  $+ 5$  $1$  $+ 15$  $2$  $+ 15$  $3$  $+ 15$  $4$  $+ 15$  $5$  $+ 15$  $16$  $+ 1$  $16$  $+ 2$  $16$  $+ 3$  $16$  $+ 4$  $1$  $+ 16$  $2$  $+ 16$  $3$  $+ 16$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 4 \\ + 16 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 18 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 18 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 19 \\ \hline \end{array}$$

$$\begin{array}{r} \\ \\ \hline \end{array}$$

$$\begin{array}{r} \\ \\ \hline \end{array}$$

$$\begin{array}{r} \\ \\ \hline \end{array}$$

## CCSS Mathematics Assessment Task

### Addition Math Facts

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Add and subtract within 20

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.

Student Materials:

- Slate board (small whiteboard) – one per student
- Dry erase marker
- Whiteboard eraser or paper towel

If slate boards are not available, students may also use:

- Paper and a marker
- Paper inside of a clear sheet protector and dry erase marker

Teacher Materials:

- Addition Math Facts flash cards

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students individually or in small groups.

- Randomly select 10 Addition Math Facts flash cards.
- Gather students in an area where they will all be able to see the flash cards.
- Tell students “I will hold up an addition problem. Solve it as quickly as you can. Write your answer on your board (paper, etc.) and hide it until I ask everyone to show their answer.”
- Hold up one card. Give students time to solve and write down their answer.
- Observe how they solve the problems. (example: Does the student frequently use his/her fingers to solve? Or does he/she know it immediately?)
- Ask the students to show their answers.
- Repeat for all 10 cards.

*Teacher option:* Check on the types of addition strategies students are using by asking them to discuss how they solved particular problems.

## CCSS Mathematics Assessment Task

Correct or Model Answer:

	+1	+2	+3	+4	+5	+6	+7	+8	+9
+1	2	3	4	5	6	7	8	9	10
+2	3	4	5	6	7	8	9	10	11
+3	4	5	6	7	8	9	10	11	12
+4	5	6	7	8	9	10	11	12	13
+5	6	7	8	9	10	11	12	13	14
+6	7	8	9	10	11	12	13	14	15
+7	8	9	10	11	12	13	14	15	16
+8	9	10	11	12	13	14	15	16	17
+9	10	11	12	13	14	15	16	17	18

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Know from memory all sums of two one-digit numbers (2.OA.2)	Student mostly relies on strategies to solve.	Student occasionally uses a strategy to solve.	Student accurately solves the problems in a reasonable* amount of time.

\*This assessment can be used throughout the year and a reasonable amount of time would be different depending upon the time of the year that you are assessing the student.

- Example: A student trying to solve  $9+7=$

If the student uses the “make a 10” strategy and thinks of  $9+7$  as:

$$9+(1+6) =$$

$$10+6=16$$

If the student takes a few seconds to figure this out in their head, this is acceptable.

- As we year progresses, students should be taking less time to figure out the problems. In Quarter 1, students may take up to 5 seconds or so to figure out the sums of two one-digit facts but by the end of the year, students should be taking less time and should be solving the problems much more quickly. Teachers are encouraged to use their own professional judgment.

**CCSS Mathematics Assessment Task**

Addition Math Facts

$$\begin{array}{r} 1 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 2 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 1 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 4 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 5 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 7 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

CCSS Mathematics Assessment Task

$$\begin{array}{r} 9 \\ + 0 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 1 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 2 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 3 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 5 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 6 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 7 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 8 \\ \hline \end{array}$$
$$\begin{array}{r} 9 \\ + 9 \\ \hline \end{array}$$

## CCSS Mathematics Assessment Task

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups to gain foundation for multiplication.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Student Materials:

- Pencil

Teacher Materials:

- Kristy's Garden assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups, or as a whole class.

- Hand out Kristy's Garden assessment sheets (one per student)
- Tell students "You will be identifying even and odd numbers and explaining your thinking."
- As you point to each part of the prompt (different layouts, determining whether the same number of tulips and lilies can be used), say, "You will determine whether layout A or B is even and explain how you know; decide whether or not you can plant the same amount of tulips and lilies in the layout you chose and explain; and, finally, you will write an equation for the number of tulips and lilies Kristy would have to buy."
- Tell students "Remember to read the directions for each part carefully."
- Have students work independently on task

*Differentiation option:* If needed, have students use counters (or other small objects).

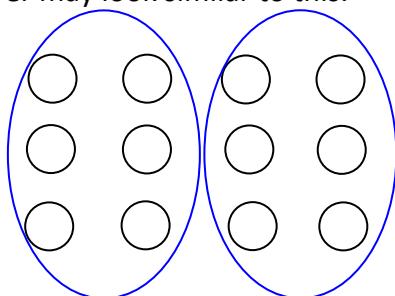
*Teacher note:* Prior to this assessment, teach the vocabulary "equal" or "equal amount."

Prompt:

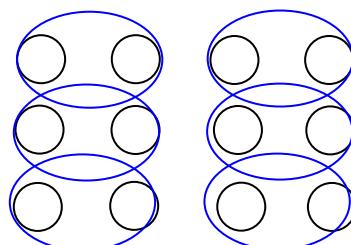
See attachment.

Correct or Model Answer:

Answer may look similar to this.



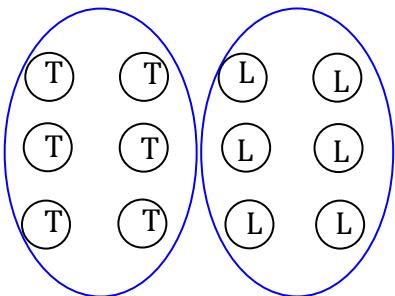
Group A is even because I can group the objects into two equal groups.



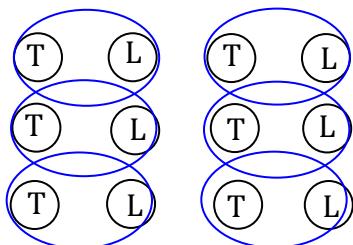
Group A is even because I can group the objects into pairs without any leftovers.

## CCSS Mathematics Assessment Task

6 tulips + 6 lilies = 12 flowers in all.



T = tulip  
L = lily



T = tulip  
L = lily

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

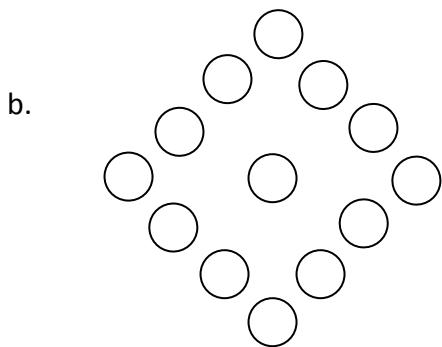
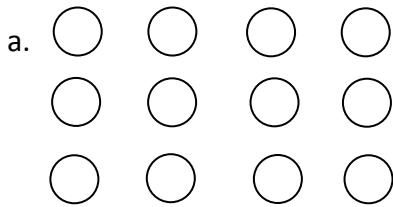
Criteria (CCSS code)	0 points	1 Point	2 Point
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s. (2.OA.3)	No strategy used to show that there is an even number of objects and explanation is unclear.	Strategy is used to show that there is an even number of objects, but explanation is vague or unclear.	Strategy is used to show that there is an even number of objects AND explanation is clear.
Write an equation to express an even number as a sum of two equal addends. (2.OA.3)	Equation is NOT correct.	Equation is somewhat correct. (e.g., correct symbols may be used but may be in the wrong place like $6 = 6 + 12$ or $6 + = 6 12$ .)	Equation is correct.

## CCSS Mathematics Assessment Task

### Kristy's Garden

**Problem:**

Kristy is planting some flowers in her garden. She wants to plant an even amount of flowers. Which of the following layouts will allow her to do that?



Which of the layouts above have an even number of flowers? \_\_\_\_\_

Explain your thinking.

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Kristy wants to use the layout that has an even number of flowers. She wants to plant **equal amounts** of tulips and lilies.

How many tulips and lilies will she need? \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_  
 # of tulips      # of lilies      total number of flowers

<b>Scoring Guide/Rubric</b> (a score should be awarded for each criterion below)			
<b>Criteria (CCSS code)</b>	<b>0 points</b>	<b>1 Point</b>	<b>2 Point</b>
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s. (2.OA.3)	No strategy used to show that there is an even number of objects and explanation is unclear.	Strategy is used to show that there is an even number of objects, but explanation is vague or unclear.	Strategy is used to show that there is an even number of objects AND explanation is clear.
Write an equation to express an even number as a sum of two equal addends. (2.OA.3)	Equation is NOT correct.	Equation is somewhat correct. (e.g., correct symbols may be used but may be in the wrong place like $6 = 6 + 12$ or $6 + = 6 12$ .)	Equation is correct.

**CCSS Mathematics Assessment Task**

## CCSS Mathematics Assessment Task

### Even or Odd?

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups to gain foundation for multiplication.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Student Materials:

- Pencil

Teacher Materials:

- Even or Odd? assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups, or as a whole class.

- Hand out Even or Odd? assessment sheets (one per student)
- Tell students "You will be identifying numbers as either even or odd, and explaining how you know."
- Read the problem aloud to the students at least two times.
- Tell students "Remember to draw a picture and write to explain whether each number is even or odd."
- Have students work independently on task.

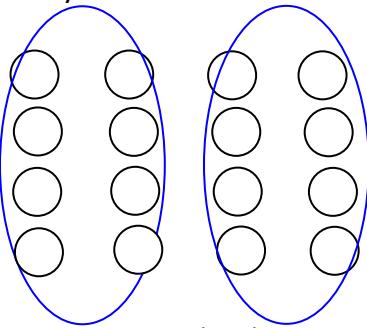
*Differentiation option:* If needed, provide counters or other small objects for students to manipulate.

Prompt:

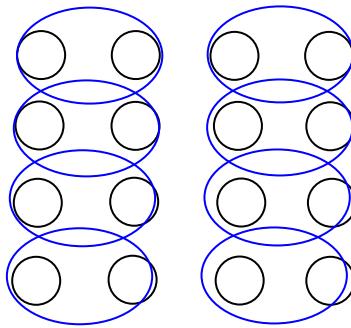
See attachment.

Correct or Model Answer:

Answer may look similar to this.

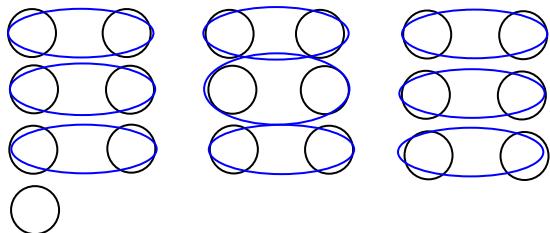


16 is an even number because I can group the objects into two equal groups.



16 is an even number because I can group the objects into pairs without any leftovers.

## CCSS Mathematics Assessment Task



19 is an odd number because when I group the objects into pairs, there is one leftover.

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	Student does not correctly identify either the even or odd number and does not explain (or show through the drawing) why the number is even/odd.	Student correctly identifies both the even and odd numbers, but does not clearly explain (or show through the drawing) why the number is even/odd.  OR  Student correctly identifies either the even or the odd number.	Student correctly identifies both the even and odd numbers AND clearly explains (or shows through the drawing) why the number is even/odd.

# CCSS Mathematics Assessment Task

## Even or Odd?

### Problem:

Mr. Robert asked Anna to help another second grader learn about even and odd numbers. He handed Anna 16 red counters and 19 blue counters to help her show and explain ways to identify even and odd numbers to her classmate. What could Anna show and say to her classmate?

Is 16 an even or odd number?	Is 19 an even or odd number?
Draw and explain.	Draw and explain.
16 is an _____ number because _____ (even or odd) _____ _____ _____ _____	13 is an _____ number because _____ (even or odd) _____ _____ _____ _____

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	Student does not correctly identify either the even or odd number and does not explain (or show through the drawing) why the number is even/odd.	Student correctly identifies both the even and odd numbers, but does not clearly explain (or show through the drawing) why the number is even/odd. OR Student correctly identifies either the even or the odd number.	Student correctly identifies both the even and odd numbers AND clearly explains (or shows through the drawing) why the number is even/odd.

## CCSS Mathematics Assessment Task

### Odd or Even Grab

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups to gain foundation for multiplication.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Student Materials:

- None

Teacher Materials:

- Collection of 20 small objects (e.g. counters, paper clips, pennies, beans, and so on)

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students individually, in small groups, or as a whole class.

Individual assessment

- Tell student "Grab a handful (or \_\_\_\_ handfuls) of objects. Then use any strategy you know to figure out whether the amount you grabbed is an even or odd amount."
- Have students repeat activity for 3 trials.

Alternative/additional activity:

- Tell student a number (1-20).
- Ask, "Is this an even or odd number?"
- Have student either explain, or use the objects, to show why.

*Teacher notes:*

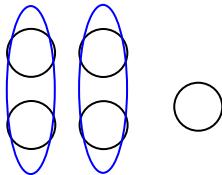
- Incorporate the second part of the standard (write an equation to express an even number as a sum of two equal addends) by asking student to separate even groups of objects into two equal piles and writing an equation to match.
- For the first activity (grabbing handfuls of objects), if the student grabs all even numbers of objects, count out an odd number of objects for him/her to work with (opposite is true if students grabs all odd numbers of objects).

## CCSS Mathematics Assessment Task

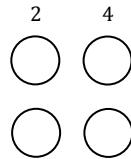
Correct or Model Answer:

Answers will vary, but may be similar to this.

(Count by 2s)



Five is an odd number because when I group 5 objects into pairs, I end up with a leftover.



Four is an even number because I can count 4 objects by 2s.

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members; e.g. by pairing objects or counting them by 2s.	Student correctly identifies 2 – 0 groups of objects as either even or odd and is NOT able to show which strategy he/she used to solve.	Student correctly and consistently identifies the amount as even or odd, but is NOT able to show which strategy he/she used to solve.  OR  Student correctly identifies 3 out of 4 groups of objects as either even or odd.	Student correctly and consistently identifies the amount as even or odd AND is able to show which strategy he/she used to solve.

## CCSS Mathematics Assessment Task

### Sorting Numbers

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work with equal groups to gain foundation for multiplication.

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members; e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Student Materials:

- Pencil
- Scissors
- Glue

Teacher Materials:

- Sorting Numbers assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups, or as a whole class.

- Hand out Sorting Numbers assessment sheets (one per student)
- Read the prompt aloud to students at least two times.
- Tell students “Remember to sort the numbers before you glue them down.”
- Have students work independently on task

*Teacher notes:* Instead of cutting out the numbers, students may write the numbers in each section.

Prompt:

See attachment.

Correct or Model Answer:

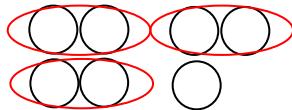
Answers will vary, but may be similar to this.

Even	Odd
4	3
6	7
14	9
18	11
20	15

These numbers are even because I say them when I count by 2s. Also, I can split those numbers into equal groups or doubles:  $4 = 2+2$ ;  $6 = 3+3$ ;  $14 = 7+7$ ;  $18 = 9+9$ ; and  $20 = 10+10$ .

These numbers are odd because when I pair up that many objects, I always end up with a leftover.

## CCSS Mathematics Assessment Task



For example, seven is an odd number because when I group 7 objects into pairs, I end up with a leftover.

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Points
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	5 or less are correctly sorted.	6 to 8 numbers are correctly sorted.	9 to 10 numbers are correctly sorted.
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	Neither explanation is clear. OR Explanations are missing.	One explanation is clear.	Both explanations are clear.

## CCSS Mathematics Assessment Task

### Sorting Numbers

Directions: Cut out the numbers at the bottom of this page. Determine whether each number is even or odd, then glue the numbers onto the appropriate spaces on the chart. Write and/or draw to explain how you know the numbers are even or odd.

Even

Odd

I know these numbers are **even** because \_\_\_\_

---

---

---

---

(space to draw, if needed)

I know these numbers are **odd** because \_\_\_\_

---

---

---

---

(space to draw, if needed)

3	4	6	7	9
11	14	15	18	20

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Points
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	5 or less are correctly sorted.	6 to 8 numbers are correctly sorted.	9 to 10 numbers are correctly sorted.
Determine whether a group of objects (up to 20) has an odd or even number of members; e.g by pairing objects or counting them by 2s. (2.OA.3)	Neither explanation is clear. OR Explanations are missing.	One explanation is clear.	Both explanations are clear.

## CCSS Mathematics Assessment Task

### Arrays

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work within groups of objects to gain foundation for multiplication

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

Student Materials:

- Pencil

Teacher Materials:

- Array assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

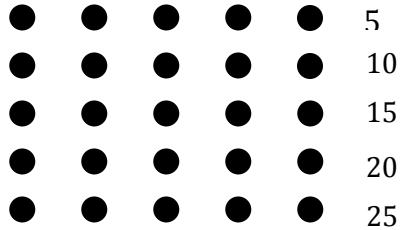
- Hand out Array assessment sheet (one per student)
- Tell students, "For each array, you will need to write a matching equation and show how you added to find the total."
- Have students work independently on task.

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.



$$5 + 5 + 5 + 5 + 5 = 25$$

or

5, 10, 15, 20, 25

$$\begin{array}{c} 5 + 5 + 5 + 5 + 5 = \\ \swarrow \quad \searrow \end{array}$$

$$\begin{array}{r} 10 \\ 10 \\ \swarrow \quad \searrow \\ 20 \end{array} + 5 = 25$$

## CCSS Mathematics Assessment Task

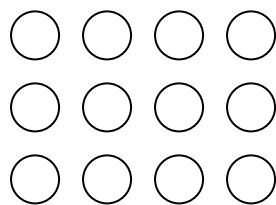
Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	<p>The student does not draw an array. OR The student draws an array that is significantly different from the problem.</p>	<p>The student draws an array that matches the problem with minor errors.</p>	<p>The student draws an accurate array to match the problem.</p>
Write an equation to express the total as a sum of equal addends. (2.OA.4)	<p>The student does not write an array. OR The student writes an equation that does not match the array.</p>	<p>The student writes an equation that matches the array with minor errors.</p>	<p>The student writes a correct equation that matches the array.</p>

# CCSS Mathematics Assessment Task

## Arrays

Directions: Write an equation to match the array.

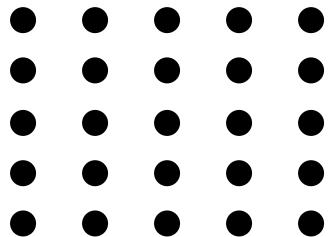
1.



Equation:

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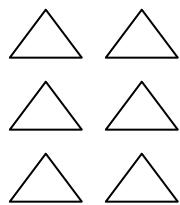
2.



Equation:

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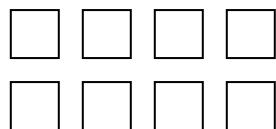
3.



Equation:

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4.



Equation:

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### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	<p>The student does not draw an array. OR The student draws an array that is significantly different from the problem.</p>	<p>The student draws an array that matches the problem with minor errors.</p>	<p>The student draws an accurate array to match the problem.</p>
Write an equation to express the total as a sum of equal addends. (2.OA.4)	<p>The student does not write an array. OR The student writes an equation that does not match the array.</p>	<p>The student writes an equation that matches the array with minor errors.</p>	<p>The student writes a correct equation that matches the array.</p>

## CCSS Mathematics Assessment Task

Mr. Oshiro's Band

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work within groups of objects to gain foundation for multiplication

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

Student Materials:

- Pencil
- Scissors
- Glue

Teacher Materials:

- Mr. Oshiro's Band assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Mr. Oshiro's Band assessment sheets (one per student)
- Tell students, "For this word problem, you will need to show three different arrays for the number 12."
- Read the prompt aloud to the students at least two times.
- Hold up the Tile sheet and say, "You will need to cut out these tiles and arrange them into three different arrays for the number 12. Once you've arranged them, glue each array into one of the boxes on the assessment sheet and write a matching equation."
- Have students work independently on task.

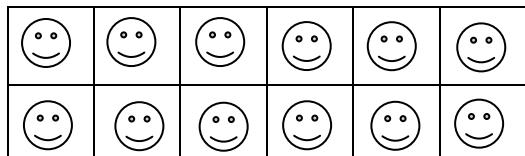
*Differentiation option:* If needed, students may use counters or other manipulatives to create arrangements.

Prompt:

See attachment.

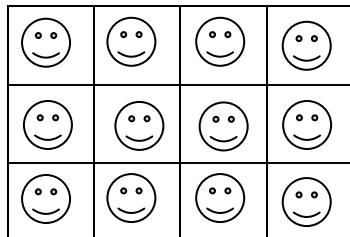
Correct or Model Answer:

Answer may look similar to these.



Equation:

$$6 + 6 = 12$$



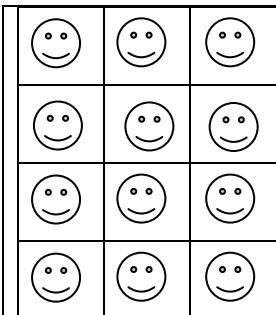
Equation:

$$4 + 4 + 4 = 12$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline 8 \end{array}$$

$$+ 4 = 12$$

## CCSS Mathematics Assessment Task



Equation:

$$3 + 3 + 3 + 3 = 12$$

$\swarrow \quad \searrow$   
6    +    6    = 12

### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	Incorrect totals for most of the arrays AND/OR significant errors were made in adding to find the total.	Total number of objects for most of the arrays is correct OR a few minor errors were made in adding to find the total.	Total number of objects for each array is correct.
Write an equation to express the total as a sum of equal addends. (2.OA.4)	Few or none of the equations match the arrays.	Most of the equations match the arrays.	Equations match the arrays.

## CCSS Mathematics Assessment Task

Mr. Oshiro's Band

Problem:

Mr. Oshiro has 12 students in his band. If there has to be at least two rows of students, show the different arrays that Mr. Oshiro can seat his students in. Write the equations to match the arrays.

Possible arrays:

Equation:

Equation:

Equation:

## CCSS Mathematics Assessment Task

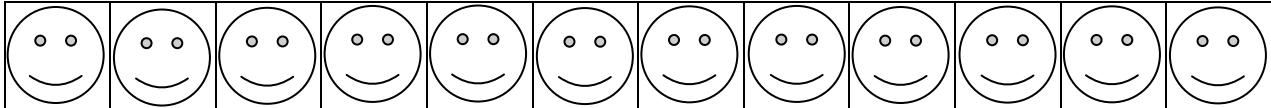
Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	Incorrect totals for most of the arrays AND/OR significant errors were made in adding to find the total.	Total number of objects for most of the arrays is correct OR a few minor errors were made in adding to find the total.	Total number of objects for each array is correct.
Write an equation to express the total as a sum of equal addends. (2.OA.4)	Few or none of the equations match the arrays.	Most of the equations match the arrays.	Equations match the arrays.

### Tiles

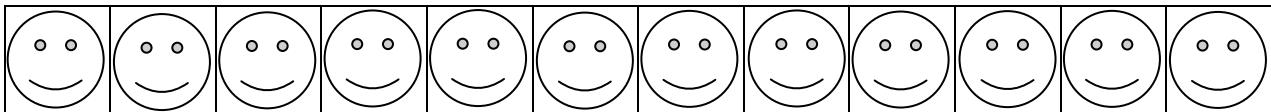
Cut out the tiles. Arrange them in an array to show the different seating arrangements for Mr. Oshiro's students. Glue the arrays onto the assessment sheet.

Array 1

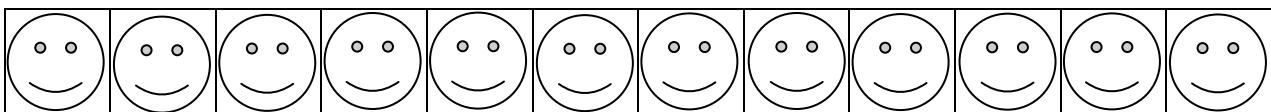
### CCSS Mathematics Assessment Task



Array 2



Array 3



## CCSS Mathematics Assessment Task

### Mrs. Pink's Flowers

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work within groups of objects to gain foundation for multiplication

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

Student Materials:

- Pencil

Teacher Materials:

- Mrs. Pink's Flowers assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Mrs. Pink's Flowers assessment sheets (one per student)
- Tell students, "For this word problem, you will need to draw the array and write an equation to match."
- Read the prompt aloud to the students at least two times.
- Remind students "Remember to draw the array and write an equation to match."
- Have students work independently on task.

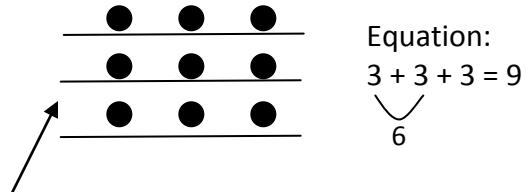
*Differentiation option:* If needed, students may use counters or other manipulatives to create arrangements.

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.



3 rows in the dirt

Mrs. Pink can plant 3 seeds in each row.

## CCSS Mathematics Assessment Task

<b>Scoring Guide/Rubric</b> (a score should be awarded for each criterion below)			
<b>Criteria (CCSS code)</b>	<b>0 points</b>	<b>1 Point</b>	<b>2 Point</b>
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	The student does not draw an array. OR The student draws an array that is significantly different from the problem.	The student draws an array that matches the problem with minor errors.	The student draws an accurate array to match the problem.
Write an equation to express the total as a sum of equal addends. (2.OA.4)	The student does not write an array. OR The student writes an equation that does not match the array.	The student writes an equation that matches the array with minor errors.	The student writes a correct equation that matches the array.

## CCSS Mathematics Assessment Task

### Mrs. Pink's Flowers

Problem:

Mrs. Pink bought 9 sunflower seeds. If she made 3 rows of dirt, how many seeds can Mrs. Pink plant in each row?

Draw an array to match the problem

Mrs. Pink can plant \_\_\_\_\_ sunflower seeds in each row.

Write an equation with equal addends to match the array.

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#### **Scoring Guide/Rubric** (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	The student does not draw an array. OR The student draws an array that is significantly different from the problem.	The student draws an array that matches the problem with minor errors.	The student draws an accurate array to match the problem.
Write an equation to express the total as a sum of equal addends. (2.OA.4)	The student does not write an array. OR The student writes an equation that does not match the array.	The student writes an equation that matches the array with minor errors.	The student writes a correct equation that matches the array.

## CCSS Mathematics Assessment Task

### Pam's Cookies

Grade Level: 2

Mathematics Domain and Cluster:

Domain: Operations and Algebraic Thinking

Cluster: Work within groups of objects to gain foundation for multiplication

Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):

2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

Student Materials:

- Pencil

Teacher Materials:

- Pam's Cookies assessment sheets

Directions (for teacher to administer assessment task):

Teacher may choose whether to assess students in small groups or as a whole class.

- Hand out Pam's Cookies assessment sheets (one per student)
- Tell students, "For this word problem, you will need to draw the array and write an equation to match."
- Read the prompt aloud to the students at least two times.
- Remind students "Remember to draw the array and write an equation to match."
- Have students work independently on task.

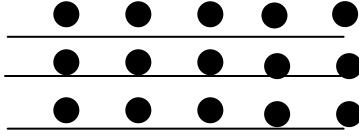
*Differentiation option:* If needed, students may use counters or other manipulatives to create arrangements.

Prompt:

See attachment.

Correct or Model Answer:

Answer may look similar to this.



Equation:

$$5 + 5 + 5 = 15$$

↙  
10

Pam baked 25 cookies in all.

## CCSS Mathematics Assessment Task

Scoring Guide/Rubric (a score should be awarded for each criterion below)			
Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	<p>The student does not draw an array. OR The student draws an array that is significantly different from the problem.</p>	<p>The student draws an array that matches the problem with minor errors.</p>	<p>The student draws an accurate array to match the problem.</p>
Write an equation to express the total as a sum of equal addends. (2.OA.4)	<p>The student does not write an array. OR The student writes an equation that does not match the array.</p>	<p>The student writes an equation that matches the array with minor errors.</p>	<p>The student writes a correct equation that matches the array.</p>

## CCSS Mathematics Assessment Task

### Pam's Cookies

Problem:

Pam made a batch of cookies. She baked 3 rows of cookies, with 5 cookies in each row. How many cookies did Pam bake?

Draw an array to match the problem

Pam baked \_\_\_\_\_ cookies in all.

Write an equation with equal addends to match the array.

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#### Scoring Guide/Rubric (a score should be awarded for each criterion below)

Criteria (CCSS code)	0 points	1 Point	2 Point
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns. (2.OA.4)	The student does not draw an array. OR The student draws an array that is significantly different from the problem.	The student draws an array that matches the problem with minor errors.	The student draws an accurate array to match the problem.
Write an equation to express the total as a sum of equal addends. (2.OA.4)	The student does not write an array. OR The student writes an equation that does not match the array.	The student writes an equation that matches the array with minor errors.	The student writes a correct equation that matches the array.