



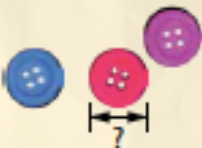
# Second Grade Math

Week of April 27, 2020  
[knoxschools.org/kcsathome](https://knoxschools.org/kcsathome)

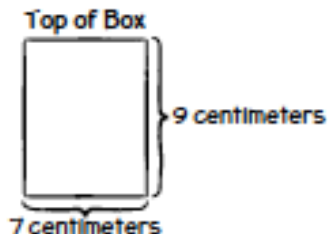
Read this problem about measuring in centimeters.  
Then look at Bella's solution to the problem.

### Buttons

Bella saves buttons to decorate things she makes. Bella wants to glue some buttons on the front of a pencil box. Each button is the same width.



- Put buttons in a line around all 4 edges.
- The buttons do not have to touch.
- Measure the button to help you plan.



How can Bella decorate the pencil box? Draw a picture. Tell how many buttons she needs.

Look at Bella's solution on the next page. There are many ways to solve the problem.

How might you solve it in a different way?

How could you make a design with no space between the buttons?

### Bella's Solution

► **First, I can measure the button.**

It is 1 centimeter wide.

► **I need 4 lines of buttons.**

I'll put 1 centimeter of space between the buttons.

► **I can make a drawing to show my thinking.**

- Start with the long sides.
- Draw and count 9 centimeters.
- Then make the top and bottom numbers.
- Draw and count 7 centimeters.

1 2 3 4 5 6 7 Both sides have 5 buttons and 4 spaces.  $5 + 4 = 9$

2  
3

4  
5

6  
7

8  
9

9 centimeters and 7 centimeters match the drawing.

► **I can count all the buttons to see how many I need.**

There are 14 buttons.

Hi, I'm Bella.  
Here's how I solved this problem.

I made a drawing to help me solve the problem.

I checked my work by adding.

Solve the problem below on a separate sheet of paper. There are several ways you can solve it.

## Wood Scraps

Bella saves scraps of wood to reuse. She wants you to find:

- the length of each piece in inches.
- how many pieces there are of each length.
- the length of the shortest and longest pieces.
- the difference between the shortest and longest pieces.



Use the image of the inch ruler on letter “a” to help you measure all the lengths of wood pieces.

## How can Bella organize the data?

- **Plan It and Solve It** Find a solution to Bella’s Wood Scraps problem.

Make sure to do all parts of the task.

- Measure each piece of wood.
- Organize the data in a line plot or bar graph.
- Use words to describe the lengths of the scraps of wood.

You may want to use the problem-solving tips to get started.

### Problem-Solving Tips

#### • Questions

- What tool should I use to measure?
- How will I show the data?

#### • Word Bank

length	longer	shorter
difference	inches	longest
shortest	compare	

Solve the problem on a separate sheet of paper.

## Craft Supplies

Bella likes to recycle items for her projects. But she still has to buy some things. Bella wants to buy some wooden hearts and some wooden letters. She can spend up to \$1 on hearts and up to \$1 on letters.



Wooden hearts: 44¢ each



Wooden letters: 28¢ each

How many hearts and letters can Bella buy?

### ► **Solve It** Help Bella decide what to buy.

- Tell how many hearts and letters to buy.
- Give the cost for the hearts and for the letters.
- Name a group of coins she could use to buy hearts.
- Name a group of coins she could use to buy letters.

### ► **Reflect**

**Use Mathematical Practices** Talk about this question with a partner.

- **Use Structure** How did you use the values of coins to solve the problem?

## Bella's Bottles

Bella wants to make a garden border. She will use red and blue recycled bottles to make it.



Read Bella's notes.

### My Notes

- The whole border is between 60 and 72 inches.
- Part A is between 45 and 55 inches.
- Part B is between 15 and 25 inches.

Garden	
Part A	Part B
Red Bottles	Blue Bottles

How can Bella design her border?

### ► **Solve It** Help Bella make a plan for her border.

- Write the length for each part.
- Show all your work.
- Tell why your measurements work.

### ► **Reflect**

**Use Mathematical Practices** Talk about this question with a partner.

- **Make an Argument** How did you show that your measurements work?

## Possible Solutions

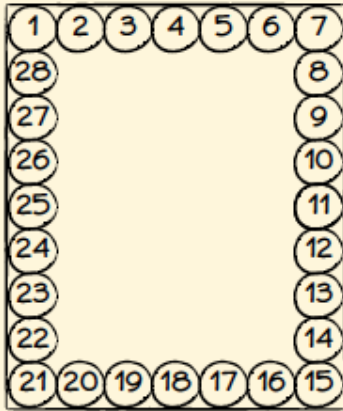
\*Remember that with our Math in Action lessons there may be multiple solutions!

### Buttons

The button is 1 centimeter wide. I need to put buttons around the edge of the box front and tell how many I need. I will make the buttons touch, with no space between.

I can use a ruler to draw the box. There is room for 7 buttons along the top and bottom and 9 along each side.

Count the buttons but only count the corners once. There are 28 buttons.



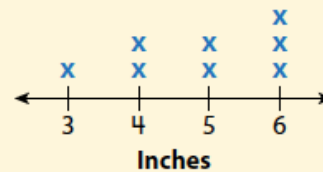
### Wood Scraps

I need to measure each wood scrap and find how many pieces there are of each length. I need to find the shortest and longest lengths and find the difference. I also need to describe the lengths in words and organize the information in some way. I will use a line plot. First, make a table of the lengths to help.

Piece	A	B	C	D	E	F	G	H
Length (inches)	6	5	4	6	5	3	6	4

Three pieces are 6 inches long. Two are 5 inches long. Two are 4 inches long. One is 3 inches long. The shortest piece is 3 inches and the longest is 6 inches. The difference between them is 3 inches.

#### Lengths of Wood Scraps



### Craft Supplies

I know that hearts cost 44¢ each and letters cost 28¢ each. I have to decide how many Bella will buy. She has 1 dollar for hearts and 1 dollar for letters.

I think she should buy as many as possible. 2 hearts cost  $44 + 44 = 88$  cents. 3 hearts cost  $88 + 44 = 132$  cents, which is more than 1 dollar. So she should buy 2 hearts.

2 letters cost  $28 + 28 = 56$  cents. 3 letters cost  $56 + 28 = 84$  cents. 4 letters cost  $56 + 56 = 112$  cents, which is more than 1 dollar. So she should buy 3 letters.

To buy 2 hearts for 88 cents, she can use 8 dimes and 8 pennies.  $80 + 8 = 88$ .

To buy 3 letters for 84 cents, she can use 3 quarters, 1 nickel, and 4 pennies.  $25 + 25 + 25 + 5 + 1 + 1 + 1 + 1 = 84$ .

### Bella's Bottle

The border has 2 parts. Part A is between 45 and 55 inches, Part B is between 15 and 25 inches, and the total has to be between 60 and 72 inches.

Make Part A 50 inches. Try a number between 15 and 25 for Part B.

Try 24.  $50 + 24 = 74$ , which is greater than 72. Try a smaller number.

Now try 20.  $50 + 20 = 70$ , which is between 60 and 72. So that solution works.

Part A is 50 inches and Part B is 20 inches.

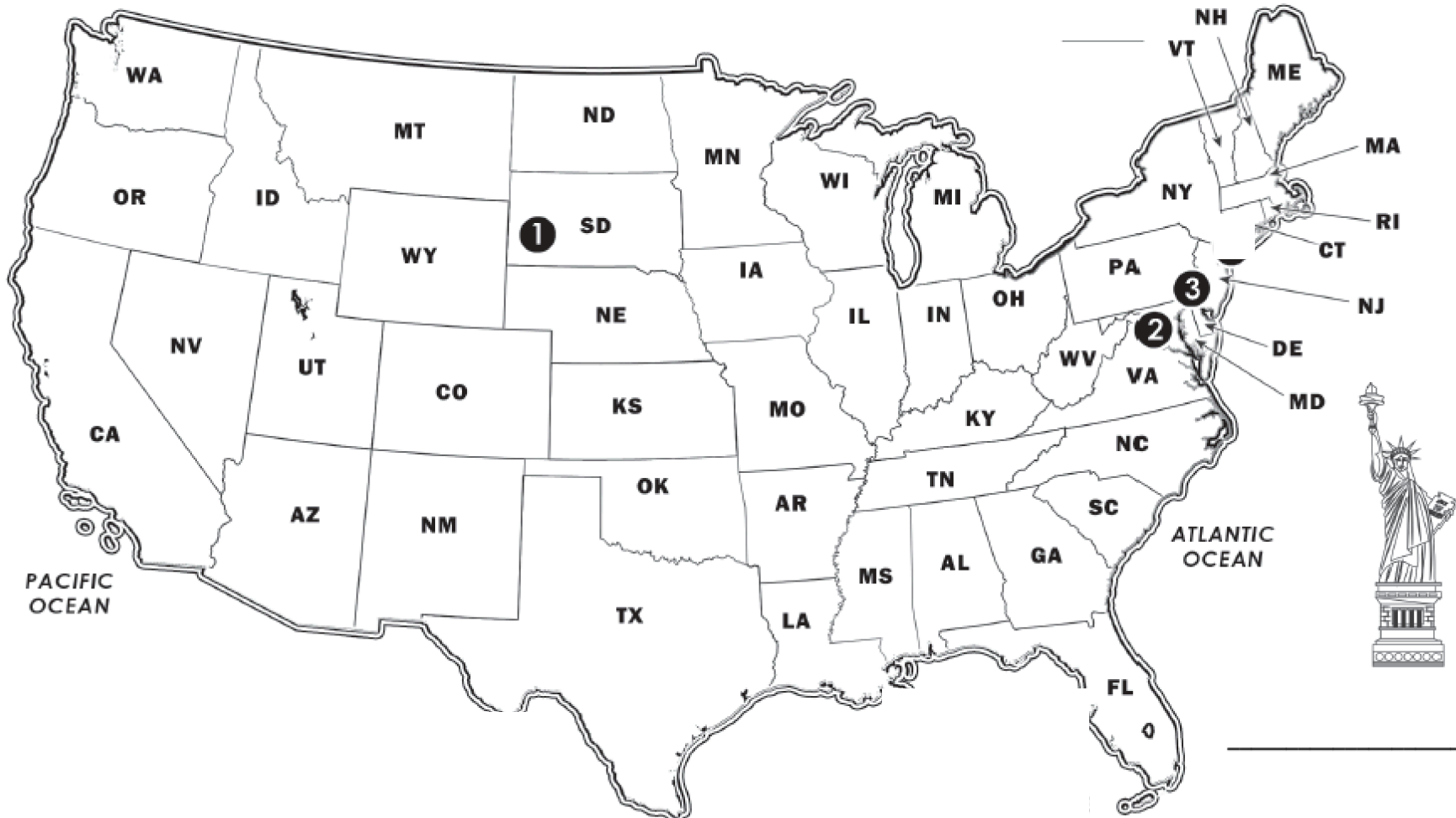


# **Second Grade Social Studies**

## 2<sup>nd</sup> Grade Social Studies National Landmark Task



**Directions:** Write the name of landmarks on the lines below each picture. Draw a line from each landmark to its location on the map. Draw an eagle anywhere on the page!





# Second Grade

## ELA



## Parent Guide

**There will be a short video lesson of a Knox County 2<sup>nd</sup> Grade Teacher to accompany this text available on the KCS YouTube Channel and KCS TV. If you have access, refer to last week's KCS packet. This week's video will include a recap of the text read last week.**

Tennessee's English Language Arts (ELA) standards ask students to read, talk, and write about a variety of texts. In this activity packet, your child will have the chance to do just that as they work to solve a mystery.

If your child completed last week's activity packet introducing them to the text and tasks, this week's activities will allow them to review their prior learning and to extend their understanding of this topic. If your child did not complete last week's activity packet, this week's activities will allow them to read, talk, and write in response to a text, as well as compare their work to an exemplar.

### 1) Check for understanding of the Essential Question for the unit:

*How do plants change over time?*

Questions for Discussion:

- How does an apple change over time?
- Do all plants change in the same way?

### 2) Reread the student's response to text and check for the following:

- Topic sentence
- Relevant details
- Conclusion sentence
- Correct use of punctuation
- Finger spaces & neat handwriting

*Does their writing make sense? Does their response answer the question?*

### 3) Option to extend:

- Ask students to choose three colors and highlight their topic sentence, details, and conclusion sentence.
- Do they have everything that they need in their writing?
- Find a book or go online to find something about plant life cycles. Read to find out if all plants change over time in the same way as apples. You can use Epic or any other free resource that is available.



# Second Grade Science

## 2<sup>nd</sup> Grade Science: Week 4: April 27<sup>th</sup>

### Changes in Earth's Surface

---

**Students read alone or with a parent and then follow directions.**

The Earth's surface is changing all of the time. The surface is the top part of the Earth where people, animals, and plants live. Many of these changes are small, occur over time, and are caused by wind and water. Wind and water can change the shape of the Earth slowly by breaking it down and moving the pieces from one place to another. Scientists call these processes weathering and erosion.

### Weathering and Erosion:

Weathering and erosion use water and wind to change Earth's surface slowly over time.

**WEATHERING** breaks down the earth into smaller pieces.



**EROSION** carries away those pieces to a new place.



### Activity 1: I can explain how wind changes the surface of the Earth.

You will observe the effects of **wind** on a mountain of soil.



#### Materials:

- Soil
- Paper Plate
- Pencil
- Recording Sheet

**Make a Prediction:** What will happen to a mountain of soil when you slowly blow on it? \_\_\_\_\_

\_\_\_\_\_

**Procedure:**

1. Gather a small amount of soil from your yard.
2. Use your hands to form a small mountain.
3. Draw a picture of your mountain of soil. → 
4. Blow one side of your mountain of soil. Did you notice any changes?
5. Blow gently 5 more times and observe the changes.
6. Draw your observations. → 

**Draw Conclusions:**

1. How did your mountain change after the first time you blew on it?

---

---

2. How did it change after you blew on it 5 times?

---

---

3. Where did the soil go when it came off the mountain?

---

---

4. How is this activity similar to weathering and erosion?

---

---

## Activity 2: I can explain how water changes the surface of the Earth.

You will observe the effects of **water** on a mountain of soil.

### Materials:

- Soil
- Paper Plate
- Water
- Spoon
- Recording Sheet
- Pencil

**Make a Prediction:** How many drops of water will it take for the water to change the shape of your mountain of soil? \_\_\_\_\_

### Procedure:

1. Use the soil from the last experiment and reform your mountain.

2. Draw a picture of your mountain of soil. →



3. Use a spoon to place small drops of water onto the mountain of soil. Look closely for any changes. Continue to place drops of water onto the soil until you can see a change in the shape of the mountain.

4. Use tally marks to show how many drops you put on the mountain before you saw a change in its shape. →



5. Draw your observations. →



### Draw Conclusions:

1. How many drops of water did it take to change the shape of your mountain?

---

---

2. Where did the soil go when it came off the mountain?

---

---

3. Do you think this represents a fast or slow change to the Earth's surface?

---

---

4. How is this activity similar to weathering and erosion?

---

---

**Activity 3: Weathering and Erosion Scavenger Hunt:**

Now, it's time for you to get outside and explore! Look for evidence of weathering and erosion in your neighborhood! You can keep a list, draw what you see, or even use a camera to take photographs of your evidence.

Some examples may include:

- Piles of soil left behind by wind and water
- Cracks in your street or sidewalk
- Broken rocks




 Take pictures and share with us by tweeting a picture to @KCSScience.