

THE FIRST SKATEBOARD

IN THE HISTORY OF THE WORLD



BETSY BYARS

Since none of my friends knew I was scared of anything, I was thought to be a tough little kid.

My bravery (and the rest of me) was about seven years old when I was selected by the neighborhood to test ride The First Skateboard in the History of the World. **A**

I didn't even know what a skateboard was. This was the summer of 1935. Skateboards hadn't been invented back then. But that did not stop our neighborhood from making one.

Here's what went into The First Skateboard in the History of the World:

- 10 One board.
 Forty-two assorted nails.
 One roller skate.

Back then, roller skates were made out of metal and could be adjusted to stretch waaaay out for long feet, which a lot of us had. We stretched this skate out so far that it came apart. This suited us just fine. We nailed the front half of the skate to the front of the board and the back half to the back.

A AUTHOR'S PURPOSE

Reread lines 1–5. For what purpose do you suppose Byars wrote this passage? Record this information in the appropriate column of your chart.

ANALYZE VISUALS
Describe as many details in this illustration as you can.



Bee
→



915 Magnolia Ave.



Red Hill



monkey bars



Betsy
Alice
Cromer
←



Then we turned the board over and hammered the tips of the nails (which had come through the board) down—hard. We had a deep respect
20 for nails. We had all stepped on nails at one time or another, and even though we **protested** all the way to the doctor's office, "It wasn't rusty! I swear it wasn't rusty! If you don't believe me ask Skrunky! He'll tell you it wasn't rusty!" we still got a shot. We also had a deep respect for shots. **B**

The whole construction took less than five minutes, and the skateboard was ready to go. By this time we knew it was a skateboard because the leader of the neighborhood—a sixth grade girl named Bee—said, "Who wants to go first on the skateboard?"

There was a silence.

Then Bee answered her own question. "Betsy will."

30 There was a sort of echo from the rest, "Betsy will-ill-ill-ill-ill."

And that was how I—seven-year-old Betsy Alice Cromer—got the honor of testing The First Skateboard in the History of the World.

At the time it didn't seem like an honor, more like a military duty.

protest (prə-tĕst') v. to argue about or object to something

B STYLE IN NONFICTION

Reread lines 18–23. Which words or phrases create a humorous tone in this paragraph?



However, we always did what Bee told us to do. The explanation “Bee told me to” often made my mother explode with, “And if Bee told you to stick your head in a lion’s mouth, would you?” “If Bee told you to jump off the Empire State Building,¹ would you?” Well . . . I was glad it never came to those things. **C**

We took the skateboard to the top of Magnolia Avenue, which was the street I lived on. Magnolia Avenue was not a steep hill, but the sidewalk had been buckled by the roots of old trees, and it was considered challenging for a skater.

We put the skateboard down on the sidewalk.

Bee said, “Go ahead, Betsy.”

I said, “I will.”

Fortunately we were unfamiliar with skateboards, and we didn’t know you were supposed to stand up on them, so I sat down. Otherwise I wouldn’t be alive today. **D**

I sat, put my feet up on the skateboard, and held on to the sides with both hands.

Somebody gave me a push.

I rolled a few inches but came to a stop at the first wide crack in the sidewalk.

They pushed again—harder.

Same disappointing ride. **E**

“This hill isn’t steep enough,” Bee complained, “I vote we take it to Red Hill.”

“Red Hill-ill-ill-ill,” came the echo.

The echo had a scary ring to it this time because Red Hill was the Alps, the Himalayas, and Mount Everest² all rolled into one.

We weren’t allowed to roller-skate down Red Hill. We weren’t even allowed to ride our bikes down it. But nobody had told us we couldn’t skateboard down it.

We set off in a silence, tense with excitement. My throat was dry. I had recently recovered from a broken arm—the result of a daring feat on the monkey bars in Dilworth Park.

See, we had been having a contest to see who could hang on to the bars by one hand the longest, and I held on so long that my body began to angle out to the side, as if I were doing a gymnastic display of agility.

C AUTHOR’S PURPOSE

Why might Byars have chosen to include her mother’s comments? Record this information in your chart.

D STYLE IN NONFICTION

Reread lines 46–48. What words or phrases help create the humorous tone?

E STYLE IN NONFICTION

Reread lines 51–55. How do the short sentences and sentence fragment help Byars create a casual style?

agility (ə-jīl’ī-tē) *n.*
quickness or ease of movement

1. **Empire State Building:** a skyscraper in New York City, once the world’s tallest building.

2. **the Alps, the Himalayas, and Mount Everest:** The Alps and the Himalayas are mountain ranges located in Europe and Asia, respectively. Mount Everest, located on the border between Nepal and Tibet, is the highest mountain in the world.

70 which I wasn't. When I finally let go, I was horizontal to the ground and landed on my left elbow, which showed its displeasure by snapping in two. (I did win the contest, but neither of my parents congratulated me on the win.)

By the time we reached the top of Red Hill, my left arm was throbbing a warning like jungle drums.

And we reached the top of Red Hill very quickly.

"Sit down," Bee said.

I didn't want to, but I had to. Bee had told me to. I sat down on the skateboard. I said, "Now don't push me till I'm ready and I'm not ready yet so don't push me till I say I'm ready, till I say 'Go.' Then when I say 'Go,' I only want Wilma to push me"—Wilma was the weak link in the gang—"and until I say 'Go,' everybody stay back and leave me—"

The neighborhood gang heard only the "Go" and they pushed. And I went.

The first thing that happened was that all the skin was scraped off my knuckles. (I was holding onto the sides of the board and my weight in the center of the board brought it closer to the road than anticipated.)

The next thing that happened was a three-part miracle.

80 The skate broke off the back of the board, the back of the board acted as a brake, and The First Skateboard in the History of the World ground to a halt twenty feet down Red Hill.

There were cries of disappointment and of determination to renail the skate and start all over again, but these cries were drowned out by my own.

"I knew it wasn't going to work! Look what it did to my fingers! If you don't know how to make skateboards, don't make skateboards! Anyway, there is no such thing as a skateboard and there never will be!"

I stormed down the hill. My shouts of outrage turned to whimpers of pain as I got out of the gang's earshot and saw the damage to my knuckles. 100 I grew silent as I got within earshot of 915 Magnolia Avenue, my home. I liked to **administer** my own first-aid treatments because I was the only one who would stop administering if it hurt.

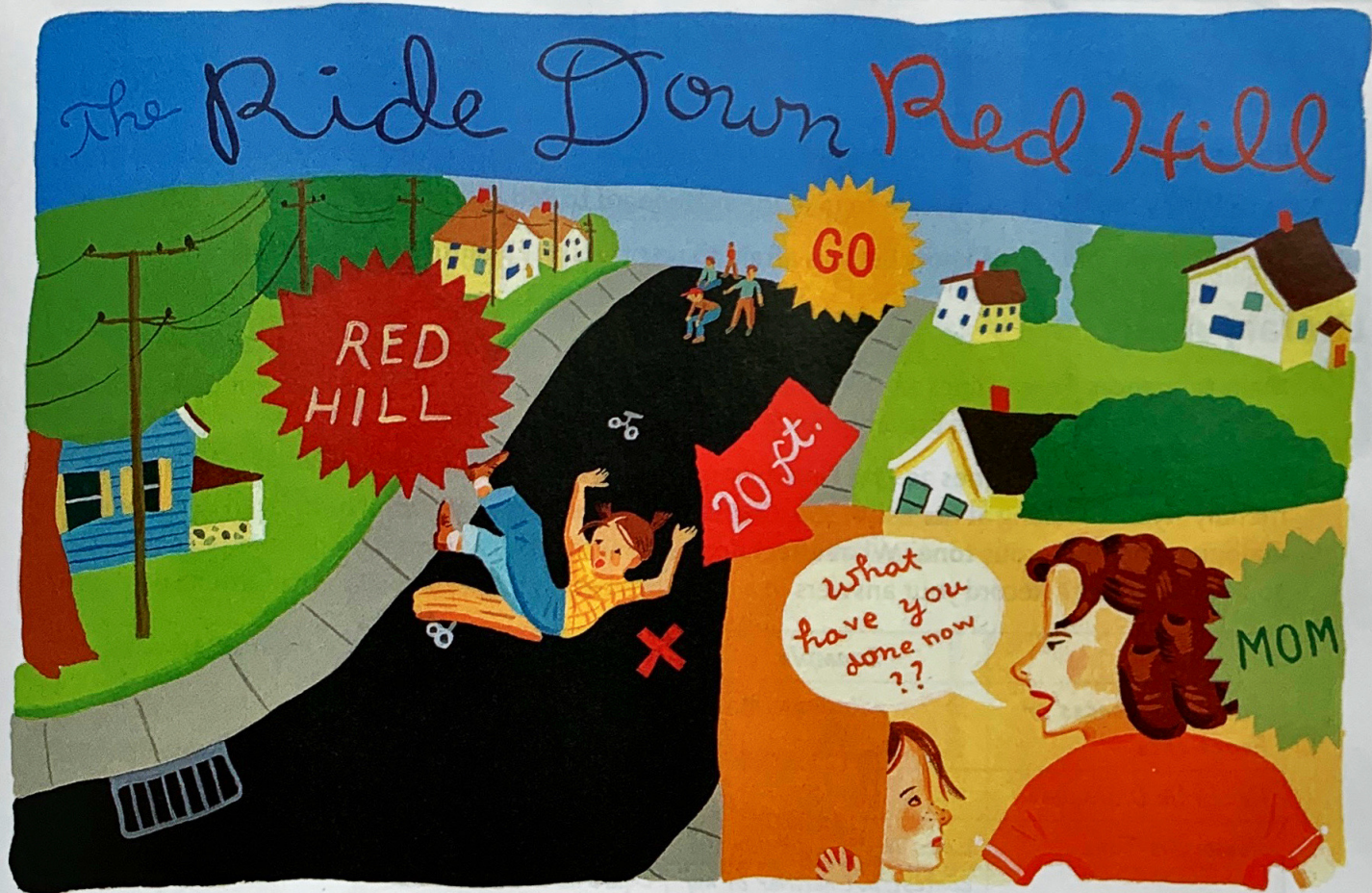
"What have you done now?" my mother asked, seeing me at the bloodied basin.

I gave my usual answer. "Nothing."

"What—have—you—done—now?" My mother always added the word *now* to give the impression that I did a lot of things.

administer

(ăd-mĭn'ĭ-sĕr) v. to give or apply



"I went down Red Hill on a skateboard."

"A what?"

110

"A board with a skate on the bottom."

"I suppose Bee told you to."

Silence.

"And if Bee told you to catch a train to Timbuktu,³ would you?"

Probably. **F**

F STYLE IN NONFICTION

Reread lines 103–114. How does Byars's use of realistic dialogue help show what she and her mother are feeling?

So the test ride of the skateboard came and went without notice, without **acclaim**. I never got on another one. I never will.

But when I see kids on skateboards doing 180 ollies, ollie impossibles, lipslides, and G-turns,⁴ I think to myself, You guys would never believe it to look at me now, but I actually test rode The First Skateboard in the

120 History of the World. **G**

acclaim (ə-klām') *n.*
enthusiastic praise

G AUTHOR'S PURPOSE

Read lines 115–120. What does Byars want her readers to know about her?

3. **Timbuktu** (tīm'būk-tōō'): a city located in central Mali, in West Africa.

4. **180 ollies . . . G-turns**: a series of complicated and even dangerous tricks and jumps done by experienced skateboarders.

Sidney, Celia, Liz, Malcolm, and Theo heard about the RAGBRAI. The five college students decide to operate bicycle tours as a summer business. They choose a route along the ocean from Atlantic City, New Jersey, to Colonial Williamsburg, Virginia. The students name their new business Ocean Bike Tours.



1.1 Getting Ready to Ride

Data Tables and Graphs



The Ocean Bike Tours business partners think their customers could ride between 60 and 90 miles in a day. Using that guideline, a map, and campground information, they plan a three-day tour route. The business partners also plan for rest stops and visits to interesting places. To finalize plans, they need to answer one more question:

- How are the cyclists' speed and distance likely to change throughout a day?

An answer to that question could only come from a test ride. Because this is difficult to do in school, you can get some ideas by doing a jumping jack experiment. This experiment will test your own physical fitness.

In this experiment, there are two quantities involved, the number of jumping jacks and time. The number of jumping jacks changes over time.

Suppose you did jumping jacks as fast as possible for a 2-minute test period.

- How many jumping jacks do you think you could complete in 2 minutes?
- How do you think your jumping jack rate would change over the 2-minute test?

Problem 1.1



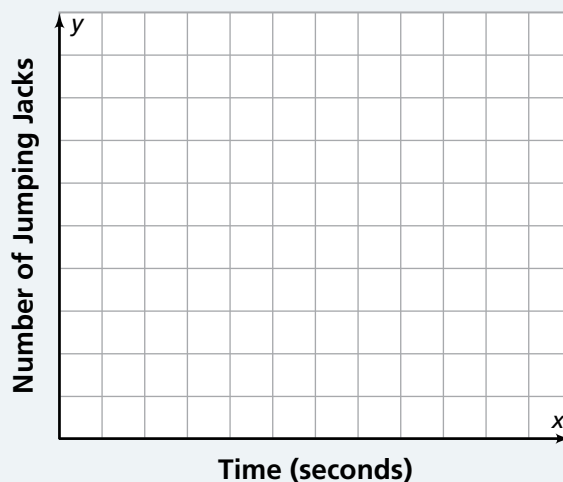
- A** Do the jumping jack fitness test with help from a timer, a counter, and a recorder. Enter the total number of jumping jacks after every 10 seconds in a data table:

Jumping Jack Experiment

Time (seconds)	0	10	20	30	40	50	60	70	...
Total Number of Jumping Jacks									

- B** Record your data on a copy of the coordinate grid shown below.

Jumping Jacks Over Time



continued on the next page >

Problem 1.1 *continued*

- C** How did the jumping jack rate (number per second) change over time?
- How is the change over time shown in the data table?
 - How is the change over time shown in the graph?
- D** Use your jumping jack data. What can you say about the cyclists' speed during the Ocean Bike Tours ride?
- E** One group said, "Our jumper did 8 jumping jacks for every 10 seconds."
- Copy and complete the table to show results if a student jumped at a steady pace matching that ratio over 60 seconds.

Jumping Jack Experiment

Time (seconds)	0	10	15	20	■	30	■	40	■	50	■	60
Total Number of Jumping Jacks	■	8	12	■	20	■	28	■	36	■	44	■

- Plot the points corresponding to the *(time, jumping jack total)* pairs in the table on a coordinate grid. Describe the pattern you see.
- Another group's jumper did 4 jumping jacks for every 6 seconds. Copy and complete the table to show results if a student jumped at a steady pace matching that ratio over 30 seconds.

Jumping Jack Experiment

Time (seconds)	0	6	9	12	■	■	30
Total Number of Jumping Jacks	■	4	■	■	10	12	■

- Plot the points corresponding to the *(time, jumping jack total)* pairs in the table on a coordinate grid. Describe the pattern you see. Compare the table and graph patterns in parts (1) and (2).



Homework starts on page 20.

1.2 From Atlantic City to Lewes

Time, Rate, and Distance

In the jumping jack experiment, the number of jumping jacks and time are variables. A **variable** is a quantity that may take on different values. One way in which values of real-life variables may change is with the passage of time. You saw this in the jumping jack experiment. The number of jumping jacks changes based on the elapsed time.

The jumping jack experiment gives some ideas about what cyclists might expect on a daylong trip. To be more confident, the Ocean Bike Tours business partners decide to test their bike tour route.

The cyclists begin their bike tour in Atlantic City, New Jersey, and ride south to Cape May. The cyclists begin their bike tour in Atlantic City, New Jersey, and ride south to Cape May.



Sidney follows the cyclists in a van with a trailer for camping gear and bicycles. Every half-hour, he records in a table the distances the cyclists have traveled from Atlantic City.

Atlantic City to Cape May

Time (h)	Distance (mi)
0	0
0.5	8
1.0	15
1.5	19
2.0	25
2.5	27
3.0	34
3.5	31
4.0	38
4.5	40
5.0	45



- As time increases, how does the distance change?

From Cape May, the cyclists and the van take a ferry across Delaware Bay to Lewes (LOO-is), Delaware. They camp that night in a state park along the ocean.

The business partners examine Sidney's (*time, distance*) data. They hope to find patterns that might help them improve the Ocean Bike Tours route and schedule. First, they have to answer this question:

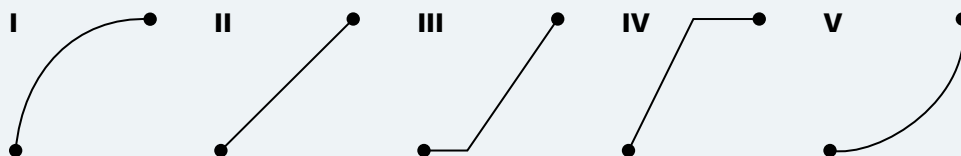
- What story does the pattern in the table tell?

Problem 1.2



- A**
1. Plot the (*time*, *distance*) data pairs on a coordinate grid.
 2. What interesting patterns do you see in the (*time*, *distance*) data?
 3. Explain how the patterns are shown in the table.
 4. Explain how the patterns are shown on the graph.
- B**
1. At what times in the trip were the cyclists traveling fastest?
At what times were they traveling slowest?
 2. Explain how your answer is shown in the table.
 3. Explain how your answer is shown by the pattern of points on the graph.
- C** Connecting the points on a graph can help you see patterns more clearly. It also helps you consider what is happening in the intervals between the points. Different ways of connecting the given data points tell different stories about what happens between the points.

Consider the data (4.5, 40) and (5.0, 45) from the first day of the Ocean Bike Tours trip. Here are five different ways to connect the graph points on the plot of (*time*, *distance*).



Match the given connecting paths to these travel stories.

1. Celia rode slowly at first and gradually increased her speed.
 2. Theo rode quickly and reached the Cape May ferry dock early.
 3. Malcolm had to fix a flat tire, so he started after the others.
 4. Tony and Sarah started off fast. They soon felt tired and slowed down.
 5. Liz pedaled at a steady pace throughout this part of the trip.
- D** What are the advantages and disadvantages of tables or graphs to represent a pattern of change?



Homework starts on page 20.

1.3 From Lewes to Chincoteague Island

Stories, Tables, and Graphs



On the second day of the bike tour test run, the team leaves Lewes, Delaware, and rides through Ocean City, Maryland. The team stops on Chincoteague (SHING kuh teeg) Island, Virginia. Chincoteague Island is famous for its annual pony auction. Here, the team camps for the night.

Did You Know?

Assateague (A suh teeg) Island is home to herds of wild ponies. The island has a harsh environment of ocean beaches, sand dunes, and marshes. To survive, these sturdy ponies eat salt marsh grasses, seaweed, and even poison ivy.



To keep the population of ponies under control, an auction is held every summer. During the famous "Pony Swim," the ponies for sale swim across a quarter mile of water to Chincoteague Island.

Problem 1.3



Malcolm and Liz drove the tour van on the way from Lewes to Chincoteague. They forgot to record time and distance data. Fortunately, they wrote some notes about the trip.

TripJournal		All Entries	June 7
Entry 1: We started at 8:00 A.M. and rode against a strong wind until our midmorning break.		Entry 4: Around 2:00 P.M., we stopped for a brief swim in the ocean.	
Entry 2: About midmorning, the wind shifted to our backs.		Entry 5: At about 4:00 P.M., all of the riders were tired. There were no bike lanes. So we packed the bikes in the trailer and rode in the van to our campsite in Chincoteague. We took 9 hours to complete today's 80-mile trip.	
Entry 3: Around noon, we stopped for BBQ lunch and rested for about an hour. By this time we had traveled about halfway to Chinoteague.			
Edit			

- Make a table of (*time*, *distance*) values to match the story told in Malcolm and Liz's notes.
- Sketch a coordinate graph that shows the information in the table. Does it make sense to connect the points on the graph? Explain your reasoning.
- Explain how the entries in your table and graph illustrate the trip notes.
- Which representation of the data (*table*, *graph*, or *written notes*) best shows the pattern of change in distance over time? Explain.



A C E Homework starts on page 20.

1.4 From Chincoteague to Colonial Williamsburg

Average Speed

Malcolm noticed that, on Day 1, the cyclists sometimes went very fast or very slow in any given hour. He also noticed that the cyclists covered 45 miles in 5 hours.

Atlantic City to Cape May

Time (h)	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Distance (mi)	0	8	15	19	25	27	34	31	38	40	45

- Malcolm claims that, on average, the cyclists covered 9 miles per hour. Is he correct?
- Did the cyclists actually cover 9 miles per hour in any one hour on Day 1? Explain.

The **average speed** per day is the rate in miles per hour for that day. Malcolm was curious to know what the average speed for Day 3 would be.

On the third day of the bike tour test run, the team travels from its campsite on Chincoteague Island to Williamsburg, Virginia. Here, they visit the restored colonial capital city.



Did You Know?

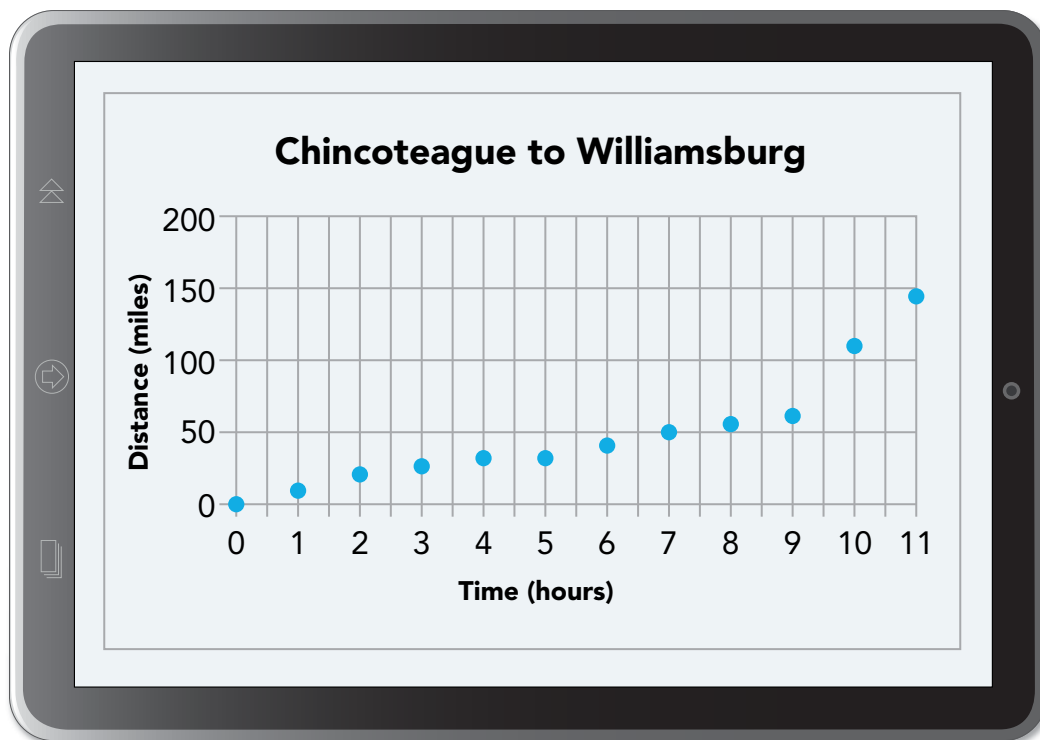
Williamsburg was the political, cultural, and educational center of Virginia from 1699 to 1780. Virginia was the largest, most populous, and most influential of the American colonies.



Near the end of the Revolutionary War, the capital of Virginia was moved to Richmond. For nearly 150 years afterward, Williamsburg was a quiet town.

Then, in 1926, a movement began to restore and preserve the city's historic buildings. Today, Williamsburg is a very popular tourist destination.

Malcolm drove and Sarah rode in the tour van on the way from Chincoteague to Williamsburg. They made a graph showing the cyclists' progress each hour.



- Describe some interesting patterns that you see in the graph.

Problem 1.4



- A** Make a table of the (*time*, *distance*) value pairs shown in the graph.
1. What does the point with coordinates (3, 25) tell about the cyclists' progress?
 2. Which points on the graph have coordinates (9, 60) and (10, 110)? What do those coordinates tell about the cyclists' time, distance, and speed on Day 3?
 3. What was the cyclists' average speed in miles per hour for the trip? How can you find this from the graph? From the table?
- B** The team has to cross the Chesapeake Bay Bridge and Tunnel. Then, they travel on an interstate highway from Norfolk to Williamsburg. So, the team bikes for only the first part of the trip.
1. Based on the graph and your table, when did the team put its bikes on the trailer and begin riding in the van?
 2. What was the team's average speed for trip time completed on bikes?
 3. What was the team's average speed for trip time completed in the van?
 4. How are differences in travel speed shown in the graph?



- C** A very strong cyclist makes the trip from Chincoteague to Williamsburg in 8 hours pedaling at a constant speed.
1. At what speed did the cyclist travel?
 2. Describe the graph of (*time*, *distance*) data for the trip.

A C E Homework starts on page 20.

2.1 Renting Bicycles

Independent and Dependent Variables

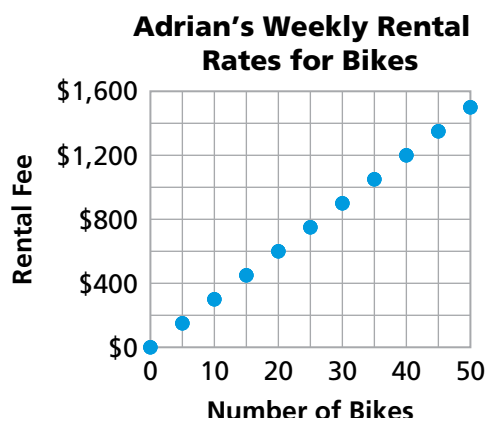
The tour operators decide to rent bicycles for their customers. They get information from two bike shops. Rocky's Cycle Center sends a table of rental fees for bikes.



Bike Rental at Rocky's

Number of Bikes	5	10	15	20	25	30	35	40	45	50
Rental Cost (\$)	400	535	655	770	875	975	1,070	1,140	1,180	1,200

Adrian's Bike Shop sends a graph of their rental prices. The number of bikes rented is called the **independent variable**. The rental cost is called the **dependent variable**, because the rental cost depends on the number of bikes rented.



Graphs usually have the independent variable on the x -axis and the dependent variable on the y -axis.

The Ocean Bike Tour partners need to choose a bike rental shop. Suppose that they ask for your advice.

- Which shop would you recommend?
- How would you justify your choice?

Problem 2.1

Use entries in the table and the graph to answer the following comparison questions.

- A** What are the costs of renting from Rocky and Adrian if the tour needs 20 bikes? 40 bikes? 32 bikes?
- B** About how many bikes can be rented from Rocky or Adrian in the following cases?
 - 1. A group has \$900 to spend.
 - 2. A group has \$400 to spend.
- C** You want to see how rental cost is related to number of bikes.
 - 1. What pattern do you see in the table from Rocky's Cycle Center?
 - 2. What pattern do you see in the graph from Adrian's Bike Shop?
- D** How can you predict rental costs for numbers of bikes that are not shown by entries in the table or points on the graph?
- E** What information about bike rental costs was easier to get from the table and what from the graph?
- F** Which data format is most useful?

A C E Homework starts on page 50.

2.2 Finding Customers

Linear and Nonlinear Patterns



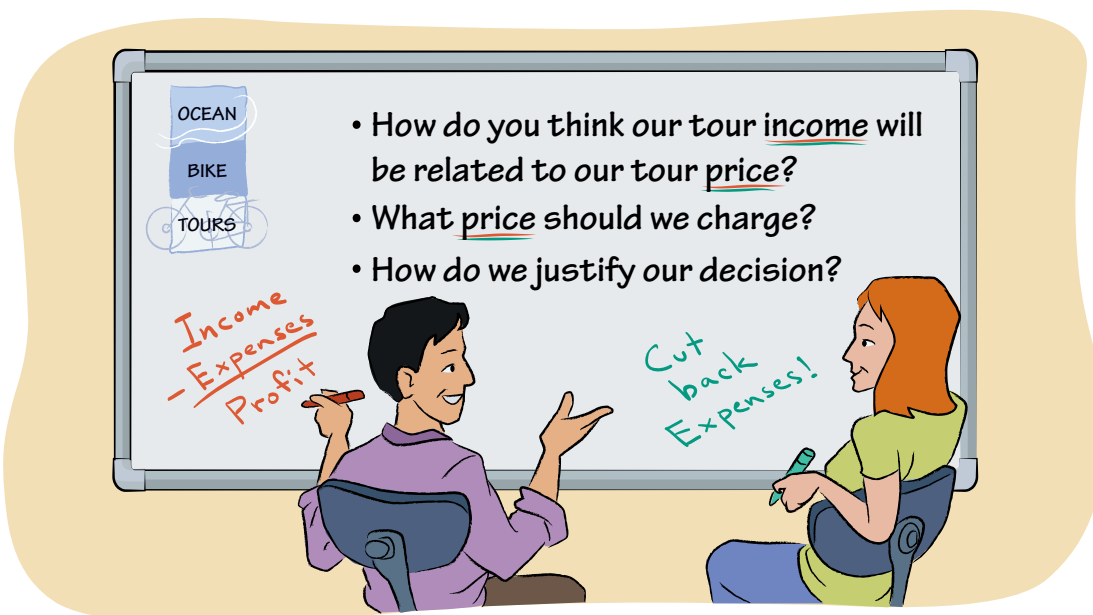
The tour operators have planned a route and chosen a bike rental shop. The next task is to figure out a price to charge for the tour. They want the price low enough to attract customers. They also want it high enough to have **income** that is greater than their expenses. That way their business makes a **profit**.

The partners conduct a survey to help set the price. They ask people who have taken other bicycle tours what they would pay for the planned bike tour.

Prices That Customers Would Pay

Tour Price	\$100	\$150	\$200	\$250	\$300	\$350	\$400	\$450	\$500
Number of Customers	40	35	30	25	20	15	10	5	0

Look carefully at the data relating price and number of customers.



Problem 2.2



The following questions can help you choose a tour price.

- A**
1. Make a graph of the data relating price and number of customers. Which is the independent variable? Which is the dependent variable? Explain how you know.
 2. How does the number of customers change as the price increases?
 3. How is the change in number of customers shown in the table? How is the change shown by the graph?
 4. How would you estimate the number of customers for a price of \$175? For a price of \$325?
- B**
1. The partners need to know what income to expect from the tour. They extend the (*price, customers*) table as shown below. Copy and complete the table to find how income would be related to price and number of customers.



Predicting Tour Income

Tour Price	\$100	\$150	\$200	\$250	\$300	\$350	\$400	\$450	\$500
Number of Customers	40	35	30	25	20	15	10	5	0
Tour Income	\$4,000	■	■	■	■	■	■	■	■

2. Make a graph of the (*price, income*) data.
3. Describe the pattern relating tour income to tour price. Use a sentence that begins, "As tour price increases, tour income . . ."
Explain why that pattern does or does not make sense.



Homework starts on page 50.

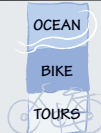
2.3 Predicting Profits

Four-Quadrant Graphing

The survey conducted by Ocean Bike Tours showed that income depends on the tour price. The partners want to see if they can make any profit from their business. As well as income, they have to consider the costs of operating the tour. Their research shows that bike rental, camping fees, and food will cost \$150 per customer.

The partners want to make a profit. They need to figure out how profit depends on the tour price.

If the price is set at \$200, we expect about 30 customers.



- What income do we expect?
- What operating cost do we expect?
- What price leads to maximum profit?
- What is the profit?



Problem 2.3

- A** 1. The table below shows the relationship between profit and price. Copy and complete the table.

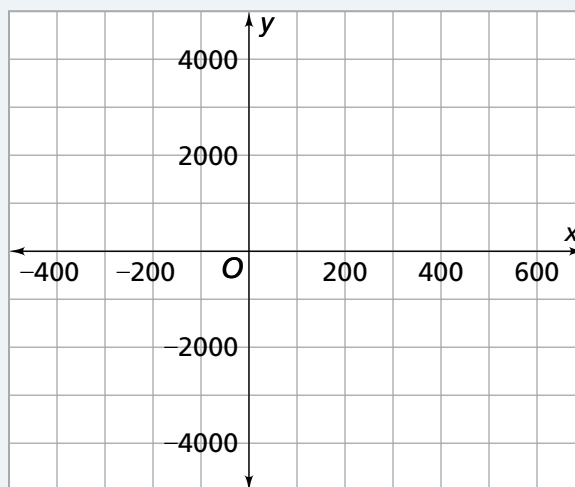
Predicted Tour Profit

Tour Price	\$100	\$150	\$200	\$250	\$300	\$350	\$400	\$450	\$500
Number of Customers	40	35	30	25	20	15	10	5	0
Tour Income (\$)	4,000	■	■	■	■	■	■	■	■
Operating Cost (\$)	6,000	■	■	■	■	■	■	■	■
Tour Profit or Loss (\$)	-2,000	■	■	■	■	■	■	■	■

Problem 2.3 *continued*

2. Celia and Malcolm want a picture of profit prospects for the tour business. They need to graph the *(price, profit)* data. Some of the data are negative numbers. Those numbers represent possible losses for the tour operation.

The key to graphing data that are negative numbers is to extend the x - and y -axis number lines. Both the x - and y -axes can be extended in the negative direction. This gives a grid like the one shown below. Use the grid to sketch a graph for the *(price, profit)* data points from the table in part (1).



3. a. Describe the pattern in the table in part (1) and the graph in part (2).
 b. Explain why the pattern occurs.
 c. Think about the analysis of profit predictions. What tour price would you suggest? Explain your reasoning.

continued on the next page >



Problem 2.3 *continued*

- B** In January, the partners thought about offering a winter bike tour. They looked at the forecast for the next four days. They wrote down the number of degrees above or below each day's average temperature.

**Degrees Above or Below
Average Temperature**

x	0	1	2	3	4
y	-1	5	-3	-5	2

They did not see any pattern, so they checked the temperatures for the previous five days. They compared those temperatures to the average. They recorded their data for all nine days in the table below.

**Degrees Above or Below
Average Temperature**

x	-4	-3	-2	-1	0	1	2	3	4
y	-2	4	-3	1	-1	5	-3	-5	2

- What do the x - and y -values represent?
 - Plot the pairs of (x, y) values in the table on a coordinate grid. Label each point with its coordinates.
 - Describe the pattern of change that relates the two variables.
- C**
- Suppose that you are standing at the point with coordinates $(3, 4)$. Tell how you would move on the grid lines to reach the points below.
 - $(-3, 4)$
 - $(-3, -4)$
 - $(3, -4)$
 - $(1.5, -2)$
 - $(-1.5, 2)$
 - $(-2.5, -3.5)$
 - How far would you have to move on the grid lines to travel between each pair of points?
 - $(3, 4)$ to $(-3, 4)$
 - $(3, 4)$ to $(3, -4)$
 - $(3, 4)$ to $(-3, -4)$
- D**
- Jakayla was looking at the points $(3, 4)$, $(-3, 4)$, $(-3, -4)$, and $(3, -4)$. She said that the locations of the points with different signs are mirror images of each other. Does Jakayla's conjecture make sense? Explain.
 - Mitch says this is like a reflection. Does Mitch's comment make sense?



Homework starts on page 50.

2.4 What's the Story?

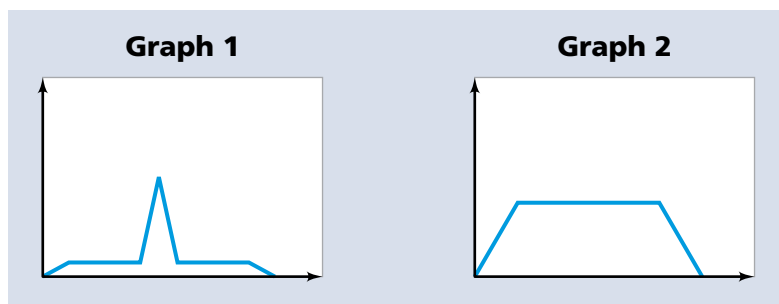
Interpreting Graphs

Information about variables is often given by coordinate graphs. So, it is important to be good at reading the “story” in a graph. Here are some questions to ask when you look at a graph.



- What are the variables?
- Do the values of one variable seem to depend on the values of the other?
- What does the shape of the graph say about the relationship between the variables?

For example, the number of cars in your school’s parking lot changes as time passes during a typical school day. Graph 1 and Graph 2 show two possibilities for the way the number of parked cars might change over time.



- Describe the story each graph tells about the school parking lot.
- Which graph shows the pattern you expect?
- How could you label the graph you chose so that someone else would know what it represents?



Problem 2.4

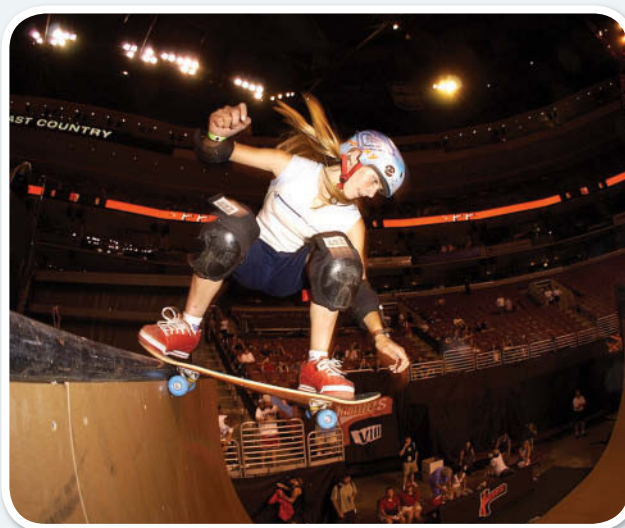
Questions A–H describe pairs of related variables.

For each pair, do the following.

- Decide what the variables are.
- Decide which variable is the dependent variable and which is the independent variable.
- Think about what a graph or table of these data would look like.
- Find the graph at the end of the Problem that tells the story of how the variables are related. If no graph fits the relationship as you understand it, sketch a graph of your own.
- Explain what the graph tells about the relationship of the variables.
- Give the graph a title.

A The number of students who go on a school trip is related to the price of the trip for each student.

B When a skateboard rider goes down one side of a half-pipe ramp and up the other side, her speed changes as time passes.



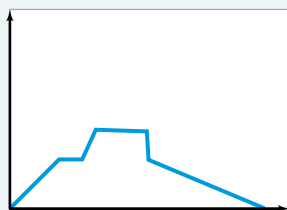
C The water level changes over time when someone fills a tub, takes a bath, and empties the tub.

D The waiting time for a popular ride at an amusement park is related to the number of people in the park.

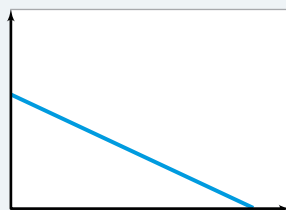
Problem 2.4 *continued*

- E** The daily profit or loss of an amusement park depends on the number of paying customers.
- F** The number of hours of daylight changes over time as the seasons change.
- G** The daily profit or loss of an outdoor skating rink depends on the daytime high temperature.
- H** Weekly attendance at a popular movie changes as time passes from the date the movie first appears in theaters.

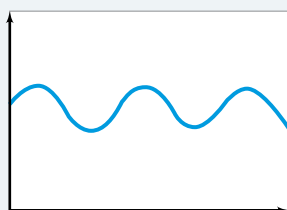
Graph 1



Graph 2



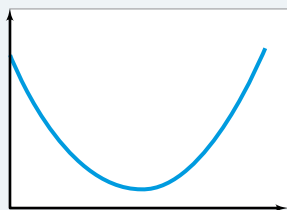
Graph 3



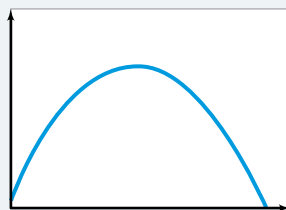
Graph 4



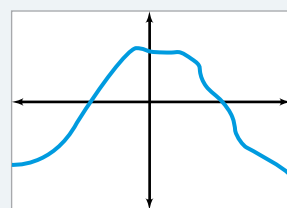
Graph 5



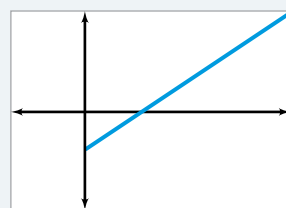
Graph 6



Graph 7



Graph 8



Homework starts on page 50.

E-Learning Path - Step by Step Performance Task Instructions

Brief Instructions for working through the task: Work through each step and submit/ communicate with your teacher after completion.

Introduction: Review Introduction to understand the problem/issue/challenge while working through the task.

Driving Question: Provided in Performance Task : The driving question provides the context for the task. It helps you understand the purpose of the challenge and the course topics you will be learning about. You will answer the question through research and creation of an authentic product(s).

1. Set the Stage

Review the *Career Video*.

Answer the **Guiding Questions**.

Complete the reflection.

Guiding Questions Reflection:

- Answer the **Guiding Questions** from the Career Video.
- What examples of course topics and skills are needed to be successful in this field?
- What questions would you want to ask the person or people featured in this video about their work and the problems they solve?

2. Explore the Background

_____ Review the Big Ideas & Essential Questions

_____ Read, View and Analyze the scenario.

- Review *Goal, Role, Audience, Situation*
- Discuss what is important and why; Take notes on your discussion identifying thoughts and ideas.

Individual/or SmallGroup Reflection:

Define the task challenge in your own words and why this task challenge is important

Gathering Background Knowledge

_____ Complete *Constructed Response(s)/Literacy Task (Optional)*

Submit CR/LT Product to PPM. (Individual/Group Submission Possible)

Review the Product and Questioning (each one would be its own screen)

- _____ Read product description
- _____ Watch product video
- _____ Consider research questions and/or view provided research questions

If creating your own research questions:

The prompt below is meant to develop research questions as part of deciding what you want to learn and need to know. Research questions should be created for EACH product and/or the task goal.

Your team will need to brainstorm questions that will drive your research related to your ROLE, the target AUDIENCE and the PRODUCT(s) that you will create. Following the brainstorm session, determine the best questions to drive your research. These questions may be adjusted as you conduct the research and learn more about what you want to do and accomplish. Be sure to build 2-3 questions for each of the following:

- *understanding the course topics needed*
- *the wants/needs of the audience*
- *creation of the projects/products*

3. Do the Research

(Inquiry) Developing questions for research for the task and/or for each product.

_____ Review the research questions you created or review the ones provided in Defined Learning. These questions will be used to help guide your research to complete the products for your audience.

_____ Determine the research to conduct. This may include *Learning Objects, Research Resources, Constructed Responses/Literacy Tasks* and/or *Career Videos* in Defined Learning or use research resources provided by your teacher.

Your teacher may want you to complete your own research on the topic.

_____ Conduct research and create answers to your questions either individually or as part of a group.

Research Reflection: *You and/or your team will need to reflect on your research process. Consider the following:*

- *Describe your research process and how you accessed valuable information.*
- *How did you decide that the research resources you used were helpful and credible?*
- *Choose one resource you used. Discuss how the resource was helpful to you. Explain why you chose this example.*
- *How did your individual research help prepare the group to create the product?*

4. Design Process & Product Creation (one of these for each product)

Brainstorming, Analyzing & Planning

_____ Review the product description, product video & rubric for the product

_____ Brainstorming: Based on your group's analysis of the research, brainstorm potential solutions, designs, and recommendations

_____ Analyze/Decide: Based on your group's brainstorming - decide on the best ways to move forward and create a product that meets the needs of the target audience and addresses the goal of the task.

_____ Create the product(s) in which you provide solutions, make recommendations, predictions, inferences, or take any other appropriate actions that are required. Make sure that the product(s) meet the needs of the audience.

_____ Present and/or submit your product(s) to the audience. Be prepared to support your decisions and the products you have developed with evidence to justify and support your findings.

5. Submit Product to PPM.

_____ Reflect on products based upon self-evaluation, rubric review, audience and/or teacher feedback. Was the Goal of the task and any other requirements met?

_____ Revise your products as needed.

Re-Submit Product to PPM if Needed.

6. Final Reflection

Final Reflection Questions (The teacher will select the most appropriate questions for reflection)

- What problems did you encounter while you were working on this task? How did you and your team solve them?
- How well did the group work together? How did you contribute to the group?
- What did you learn were your greatest strengths? Your biggest areas for improvement?
- What part of your work are you most proud of? What would you do differently next time? Why?
- What course topics did you use to create your products and solve the issue/challenge?
- What skills did you use (e.g., problem solving, creativity, critical thinking) to work through the task and finish the project?

Chemical Materials Engineer: Creating a New Portable Water Bottle

Performance Task

Introduction

Water bottles are used by people of all ages. They are an important way people can stay hydrated while they are away from home. They also play a critical role in the hydration of athletes and anyone engaged in physical exercise. As scientific researchers have investigated the materials used in portable water containers, concerns have been raised in regard to health and environmental factors. As water bottle designs continue to be refined, companies are looking for the safest, most effective water bottle that can be affordable manufactured with minimal impact on the environment.

Big Idea / Essential Questions

Big Idea

- Matter has observable physical properties and the potential to mix with and form new materials.
- People acting individually and/or as groups influence the environment.

Essential Questions

- How do scientists identify and sort materials based on their properties?
- How do humans influence the environment?

G.R.A.S.P.

Goal

Your goal is to determine the most appropriate material to use in the development and marketing of a new portable water bottle for adventure and endurance sports enthusiasts. In addition to identifying the material, you will help the engineering team create a new water bottle design and provide information to the marketing team about it.

Role

You are part of a team of engineers who must determine which type of material should be used to produce the new portable drink container that your company will market to endurance and adventure athletes. Your company is concerned with presenting an environmentally-friendly image that strongly considers the health and well-being of its customers through the materials chosen for its design.

Audience

The audience will be the board of directors for this small company. They will need to

decide the validity of your arguments, and whether or not your design will be successful in the marketplace. As you present, be sure to clearly explain all scientific ideas behind the development of the product to help them fully understand the benefits of your design.

Situation

Water bottles are utilized by all athletes who need to stay hydrated while performing their activities. As scientific research has investigated the materials used in portable water containers, concerns have been raised in regard to health and environmental factors. You will need to provide a strong understanding of the various materials and the concerns associated with each. You will need to decide the appropriate material for your design, and then consider how this material will affect the design, based upon weight, shape and transparency. This product is critical to the success of this new company. Your job, and the future of the company, depend upon your decisions and scientific understanding.

Products

1. Oral Presentation

Develop a 3-5 minute oral presentation that discusses the pros and cons of various materials that could potentially be utilized to create a new portable water container. Base this discussion on the chemical make-up of the substances. Provide the scientific and environmental benefits of each chosen material. Be sure to discuss how this material can enhance the design of the product and be aesthetically pleasing for people choosing this bottle.

- What are the scientific and environmental benefits of the material you chose?
- Why is the water container design valuable for the target audience of consumers?
- Why is the design aesthetically pleasing?

Oral Presentation - Chemical Materials Engineer: Creating a New Portable Water Bottle

Achievement Levels	1	2	3	4
Informational Presentation (x1)	The presentation is constructed using little relevant evidence emphasizing few important points.	The presentation is constructed using somewhat relevant evidence based upon research and presented in a coherent manner that emphasized some important points.	The presentation is adequately constructed using mostly relevant evidence based upon research and presented in a coherent manner emphasizing important points.	The presentation is thoroughly constructed using relevant evidence based upon research and presented in a coherent manner emphasizing important points.
Synthetic Materials (x1)	The product demonstrates minimal understanding the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates some understanding the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates sufficient understanding the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates strong understanding the impact that the creation of synthetic materials from natural resources can have on society and human health.
Structure and Function - Matter and its Components (x1)	The product demonstrates a limited understanding of the way material composition affects a substance's efficiency, safety, and viability.	The product demonstrates some understanding of the way material composition affects a product's efficiency, safety, and viability.	The product demonstrates adequate understanding of the way material composition affects a product's efficiency, safety, and viability.	The product demonstrates strong understanding of the way material composition affects a product's efficiency, safety, and viability.

Achievement Levels	1	2	3	4
Delivery (x1)	Presenters make little eye contact and could improve upon posture and/or volume.	Presenters make some eye contact, have adequate posture and volume during some parts of the presentation.	Presenter makes eye contact, has good posture and adequate volume throughout most of the presentation.	Presenter makes very good eye contact, has excellent posture and volume throughout the whole presentation.

2. Chart

Create a chart or other visual representation that highlights the important facts for a variety of potential materials that could be used to make the new water container. Provide information about how different materials can be shaped and used, their scientific properties, how they affect the environment, and their possible impact on society. Your table should provide the reader with a basic understanding of why the selected material was chosen and how it can benefit society.

- What are the physical properties of the materials you are considering?
- Can the materials be shaped and used in a variety of different ways?
- Are the materials safe for humans?
- Are the materials you are considering environmentally safe?

Chart - Chemical Materials Engineer: Creating a New Portable Water Bottle

Achievement Levels	1	2	3	4
Entering the Data Into the Chart (x1)	Chart is minimally effective in its development, providing little information that is accurate and presented in a reader-friendly manner.	Chart is partially effective in its development, providing information that is somewhat accurate with a few labels and explanations.	Chart is sufficiently effective in its development, providing information that is mostly accurate and presented in a reader-friendly manner with labels and explanations.	Chart is very effective in its development, providing information that is accurate and presented in a reader-friendly manner with labels and clear explanations.
Structure and Function - Matter and its Components (x1)	Chart demonstrates a limited understanding of the way material composition affects a substance's efficiency, safety, and viability.	Chart demonstrates some understanding of the way material composition affects a substance's efficiency, safety, and viability.	Chart demonstrates adequate understanding of the way material composition affects a substance's efficiency, safety, and viability.	Chart demonstrates strong understanding of the way material composition affects a substance's efficiency, safety, and viability.
Synthetic Materials (x1)	The product demonstrates minimal understanding of the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates partial understanding of the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates adequate understanding of the impact that the creation of synthetic materials from natural resources can have on society and human health.	The product demonstrates strong understanding of the impact that the creation of synthetic materials from natural resources can have on society and human health.
Research and Accuracy (x1)	Information presented in the chart shows that minimal research was conducted to provide accurate information about potential materials.	Information presented in the chart shows that partial research was done to provide accurate information about potential materials.	Information presented in the chart shows that sufficient research was conducted to provide accurate information about potential materials.	Information presented in the chart shows a lot of research was conducted to provide accurate information about potential materials.

3. Scale Drawing

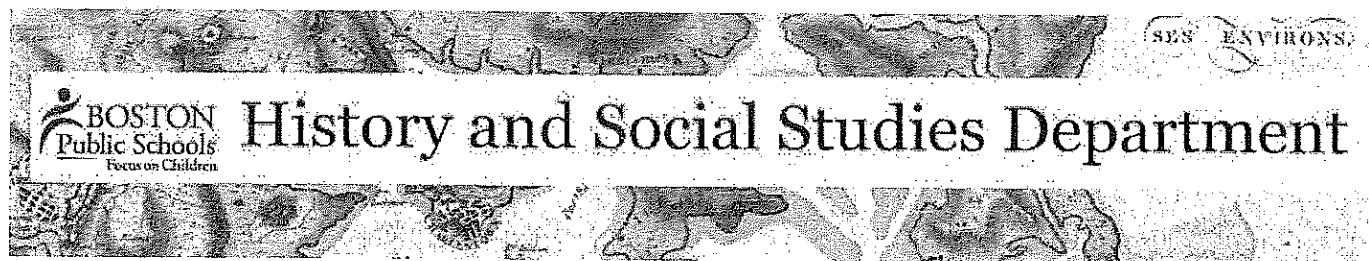
Create a scale drawing of the portable container that your team has designed. Be sure to provide all dimensions including the volume, length, width, and approximate weight. These dimensions should be labeled on the drawing along with information about material(s) and color.

- How is your design similar and different from other designs on the market?
- What is the approximate weight of the container and the materials used for the

container?

Scale Drawing - Chemical Materials Engineer: Creating a New Portable Water Bottle

Achievement Levels	1	2	3	4
Mathematical Practices in the Design Process (x1)	Product shows little attention to precision and an attempt to use mathematical tools in the design process.	Product shows partial attention to precision and some use of mathematical tools in the design process.	Product shows attention to precision and adequate use of mathematical tools in the design process.	Product shows great attention to precision and excellent use of mathematical tools in the design process.
Drawing Details (x1)	The drawing is minimally supported by labels, measurements, and attributes necessary to understand the design.	The drawing is somewhat supported by labels, measurements, and attributes necessary to understand the design.	The drawing is sufficiently supported by labels, measurements, and attributes necessary to understand the design.	The drawing is thoroughly supported by labels, measurements, and attributes necessary to understand the design.
Engineering Design (x1)	Product demonstrates little understanding of the criteria and constraints of the design problem with regard to size, materials, function, and environmental impact.	Product demonstrates partial understanding of the criteria and constraints of the design problem with regard to size, materials, function, and environmental impact.	Product demonstrates adequate understanding of the criteria and constraints of the design problem with regard to size, materials, function, and environmental impact.	Product demonstrates strong understanding of the criteria and constraints of the design problem with regard to size, materials, function, and environmental impact.
Structure and Function - Matter and it's Components (x1)	The product demonstrates minimal understanding of the way material composition affects a product's efficiency, weight, and viability.	The product demonstrates some understanding of the way material composition affects a product's efficiency, weight, and viability.	The product demonstrates adequate understanding of the way material composition affects a product's efficiency, weight, and viability.	The product demonstrates strong understanding of the way material composition affects a product's efficiency, weight, and viability.



Grade(s): 6-12

Module: 1

Topic: U.S. Census 2020		
Day #1	Day #2	Day #3
Essential Question: What is the census?	Essential Question: How have the U.S. Census questions changed over time?	Essential Question: Take Action: How can you communicate the importance of the 2020 Census to your family and community?
Student Task(s): Students will describe the census, its purpose, and how it impacts communities. <i>(source: icivics.org)</i>	Student Task(s): Students will compare the census questionnaires used in 1900 and 2010 and answer questions about how and why the questions have changed from one century to the next. <i>(source: census.gov)</i>	Student Task(s): Students will create a public service announcement (PSA) to communicate the importance of being counted during the 2020 U.S. Census.
Linked Resources: Teacher Resources Student Resources Infographic Video: What is the Census?	Linked Resources: Activity Overview Teacher Version Student Version Additional Census Forms: Census 2010 Form Census 2020 (Sample Form)	Linked Resources: Student Resource Video PSA: What is the Census? Infographic PSA: Infographic Census Quick Facts Database

Looking for more to explore?

Check out the BPS History Department Website

<http://bit.ly/bps-history>

Questions? Email BPSHistory@bostonpublicschools.org

Digital Open-Source Material

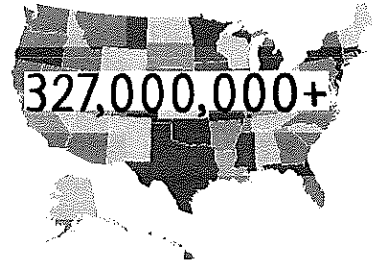
Site	Description	Grade Span
National Geographic Resource Library https://www.nationalgeographic.org/education/resource-library	Encyclopedia entries within NG's network. Many of these are adaptable to different grade levels and all can be filtered by subjects and grades.	PreK-12
Digital Public Library of America https://dp.la/	This on-line library contains searchable images, texts, videos, and sounds from across the world. It also has exhibitions and sets of primary sources to explore by topic.	6-12
TedEd Videos https://ed.ted.com/	TedEd videos are brief educational videos that feature comprehension and discussion questions about a variety of topics.	6-12
Smithsonian Learning Lab	Support deep, meaningful learning with an online universe of authentic resources and tools for making them your own.	6-12
Library of Congress https://www.loc.gov/	The Library of Congress collects, preserves & provides access to its universal collections. Students can access a litany of primary through this website. The LOC Primary Source Analysis Tool can help students effectively analyze primary sources.	9-12
iCivics https://www.icivics.org/	Series of games, learning packets, and activities around United States government and history.	3-12
Newsela https://newsela.com/	Current events content on Newsela has stories on a variety of present-day topics.	3-12
Teaching Tolerance - Student Text Library https://www.tolerance.org/classroom-resources/texts	This searchable library of short texts offers a diverse mix of stories and perspectives. This multigenre, multimedia collection (informational and literary nonfiction texts, literature, photographs, political cartoons, interviews, infographics and more).	6-12

Get Counted!

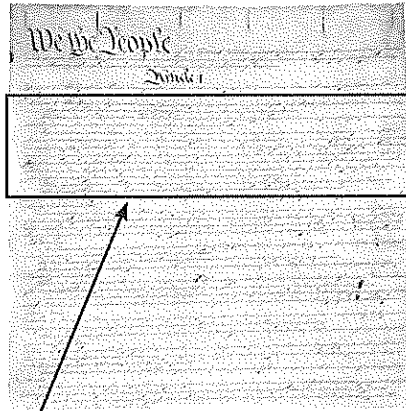
Name: _____

What is the Census?

The **census** is a count of every person in our country. It's our government's way of keeping track of our population. Every ten years, the government does a major count of every family and person, in every community across the country. The results help the government figure out what communities need and who should get what.



There are currently over 327 million people living in the United States.



The Framers thought the Census was so important they put it at the very beginning of the Constitution!

How Did the Census Start?

Article I, Section 2 of the U.S. Constitution called for a count of each state's population within three years after the first meeting of the new Congress. (And every ten years after that.) The population count would help our newly founded government figure out how to distribute the number of "**seats**" (which reflects the number of members) each state would get in the U.S. House of Representatives. That count was the first U.S. census. It happened in 1790. U.S. Marshals from district courts visited every home in the country—which only had thirteen states, three districts, and one territory at the time—and took a count of the men, women and children.

How Does It Work?

Since the first census a lot has changed. For one, U.S. Marshals no longer do the counting. Instead, we have a **Census Bureau**, an organization with thousands of people who work daily to complete the huge task of counting each and every person living in the United States. Every ten years, the Census Bureau distributes census surveys across the country. By March, households receive letters with instructions for how to complete the survey online, over the phone, or by mailing in a paper form. The Census Bureau also sends census workers called "door knockers" to rural areas and to houses that don't respond to the survey by early April to collect answers in person, too.



What Happens After Everyone Gets Counted?

Once everyone is counted, population data is shared with the President and U.S. Congress. States may lose or gain seats in the House of Representatives based on how their population has changed. The process of redistributing the House's 435 seats among the states is called **apportionment**, and it only happens after a census count. The seats are redistributed, or **reapportioned**, according to a **representation ratio** which helps ensure that each representative represents roughly the same number of people per state. Today, each representative in the House represents a little more than 747,000 people!

Get Counted!

Name: _____

Who's Counted?

A lot has changed about how people are counted. For one, now everyone is included. The first census counted white males and females and categorized them by age and gender. All other free persons, meaning mostly free blacks, were counted, too, but reported in one single category. Enslaved blacks were grouped into another category—but only counted as 3/5th of a person. Native Americans weren't counted at all, not until 1870. Today, the Census Bureau counts everyone equally. Your race doesn't matter and neither does citizenship status. The census count is a resident count, not a citizen count. If you live in the United States (or its surrounding territories), you must be counted.



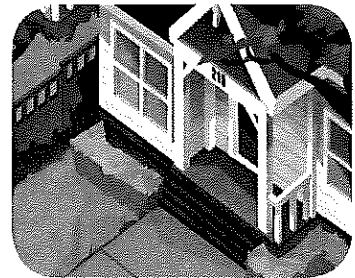
Is it Hard to Count Everyone?



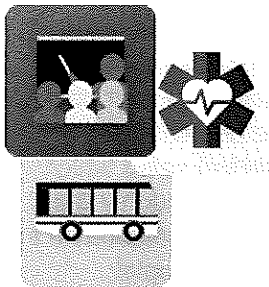
Counting every single person in the U.S. is a colossal task. Special workers called **enumerators** are hired by the Census Bureau help ensure an accurate count. But our country has hundreds of millions of diverse people, and some groups are harder to reach than others. Children ages 0-5, people who don't speak or read English well, the homeless, and some racial minorities have historically been hard for the Census Bureau to count. It's important to try to reach "**hard to count**" communities, because when people aren't fully counted, their communities miss out on the hundreds of billions of dollars the federal government distributes based on census data.

What Will the Census Ask?

The census only takes about ten minutes to complete. Only one person in your household needs to fill out the form. The census will ask for the number of people who live or stay at your home, their ages, gender, relationship to one another, and race. The census will also ask if each person is of Latino, Hispanic, or Spanish descent and if your family owns or rents your home. Any personal information like your name or address is kept private. The Census Bureau can't share that information with anyone, not even the FBI!



How Will the Census Affect Me?



Data from the census can be used to decide which communities will get money for new schools, better public buses and trains, and even hospitals. Businesses and city planners use the data to decide where to build factories, roads, offices, and stores, which help to create new jobs and improve neighborhoods. And considering that you'll be old enough to vote before the next census comes along, the results will determine the number of representatives you'll elect for your state and national governments and the amount of electoral votes your state will have in the 2024 and 2028 presidential elections. Make sure you're counted!

Get Counted!

Name: _____

Foldable. Define each word from the lesson and write a sentence using the word. Then sketch an image that will help you to remember it's meaning in the space under each word. When you're done, fold and cut your foldable according to the directions and add it to your notebook or binder.

 Census	Definition: Sentence:
 Census Bureau	Definition: Sentence:
 Apportionment	Definition: Sentence:
 Representation Ratio	Definition: Sentence:
 Enumerator	Definition: Sentence:

Get Counted!

Name: _____

A. Misinformation Fake Out. It's important that people have correct information about the census. Don't be fooled by these deceptive social media posts. Read each post and fix it in the space below by sharing a corrected version.

 Candice Tracy Counter @CandiceTracy1 Get ready for the census in 2021. Don't forget to fill out your form! #becounted #census2021 1:42 PM · 6 December 2020	 Isaiah Herman Wright @IsaiahHermanWright The census counts citizens. If you're not a citizen, no need to fill out the form. #citizencount #census #nowyouknow 12:54 AM · 6 March 2021	 Thelma Pointe @ThelmaPointe1 Don't count babies on your census form. The last census was off because people didn't do this correctly. #censusbabes #momsknowbest #census 12:02 PM · 12 January 2021
---	---	---

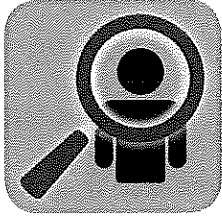
B. The Census & You. Complete the chart by thinking about how each group listed will use the census data and how that data will eventually impact you! Write your answers in the space provided.

The Census & Me How the Census Affects You...				
National Government	State and Local Government	City Planners	Businesses	You! (How will census data impact you?)
<i>The national government will use census data to...</i>	<i>State and local governments will use census data to...</i>	<i>City planners will use census data to...</i>	<i>Business will use census data to...</i>	<i>Here's how the census will impact me...</i>

Get Counted!

Name: _____

C. Hard to Count. Hard to count communities exist all over the United States and vary from location to location. What do you think would make a community hard to count? Read through some of the possible reasons, then for each group list the factors that could prevent an accurate count and think of possible solutions to overcome them.



- Access to information
- Location
- Access to resources in languages other than English
- Lack of permanent address
- Inability to complete the form
- Fear that information will not be kept private

Group	What do you think contributes to this group being undercounted?	What could the Census Bureau do to improve their count of this group?
Children ages 0-5		
Homeless		
New Residents		

Get Counted!

Name: _____

D. Primary Source. Read the excerpt and answer the questions. Some words have been defined for you. Others you'll have to figure out on your own. (Don't worry, we know you can do it!)

Article I, Section 2 of the U.S. Constitution

[Representatives and direct Taxes shall be **apportioned** among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding (not counting) Indians not taxed, three fifths of all other Persons.]¹ The actual **Enumeration** shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent (next) Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed (be greater than) one for every thirty Thousand, but each State shall have at Least one Representative; and until such **enumeration** shall be made, the State of New Hampshire shall be entitled (able) to chuse (choose) three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New-York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

¹ The 14th Amendment, ratified in 1868, changed the rule that enslaved blacks be counted as 3/5th of a person.

1. How were representatives and direct taxes apportioned among the states?

2. When did the Constitution change to count enslaved blacks as whole persons?

3. In the reading you learned what an enumerator is. Now, use that knowledge and the context clues from the excerpt to write a definition for enumeration.

4. What was the representation ratio set by the U.S. Constitution?

5. How many representatives did each state have before the first census count?

Get Counted!

Name: _____

E. Practice Survey. Directions for completing the census will soon be making their way to your door. Practice by answering a few sample questions below. The questions here will cover the first 2 people in your home. The real census will have room for everyone living or staying in your home.

Start here OR go online to complete your 2020 Census questionnaire.

Use a blue or black pen.

Directions: Before you begin, use the guidelines here to help you get an accurate count of all the people in your home.

- Count everyone, including babies, living or sleeping in your home.
- Count anyone who doesn't have a permanent address who is staying with you on April 1st.
- Do not count anyone who lives away from your home on April 1st even if they will return to your home later (i.e. anyone away at college, in the Armed Forces, staying in a nursing home, jail, or prison.)

1. How many people live or stay in your home?

Number of people =

2. Is your house, apartment, or mobile home owned or rented? (Check one)

- ☐ Owned?
☐ Rented?
☐ Neither?

3. Answer the following questions about each of the people who live in your home. Start by listing the person who pays rent or owns the home as Person 1. If that person does not live in the home, you may start with any person.

Person 1:

a. First and Last Name

b. Gender (Check one)

- ☐ Male
☐ Female

c. Age and Birthday (if the person is less than a year old, write 0 for the age)

d. Hispanic, Latino, or Spanish descent?

- ☐ Yes
☐ No

e. Race or Ethnicity

Person 2:

a. First and Last Name

b. Gender (Check one)

- ☐ Male
☐ Female

c. Age and Birthday (if the person is less than a year old, write 0 for the age)

d. Hispanic, Latino, or Spanish descent?

- ☐ Yes
☐ No

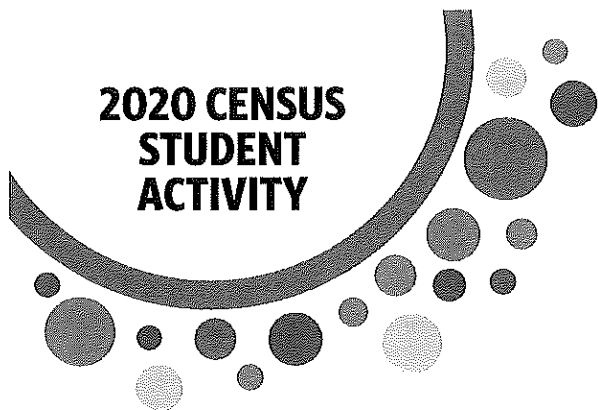
e. Race or Ethnicity

Thank you for completing the Sample Census Questionnaire!

Get Counted!

Name: _____

***Optional Activity.** Create a poster or PSA (public service announcement) to get the word out about the census and the importance of being counted. Be sure to include when the census will be happening, how people can complete it, and two other pieces of information about the census that you think will help your community ensure a complete and accurate count.



**2020 CENSUS
STUDENT
ACTIVITY**

Name _____

The Census Questionnaire: Then and Now

1. Record your answers to the two census forms you completed in the table below.

1900 Census	2010 Census

2. What differences did you notice in the forms you filled out? Why do you think those differences exist?



D-WS-ST-EN-228

Classrooms Powered by Census Data

Shape
your future
START HERE >

United States[®]
Census
2020

3. Using census questionnaires from 1900 and 2010, fill out the chart below. First, look at changes in questions about education over time. Write what you find in column 1. If a question on education was not asked, include that in your response.

Now with your group, choose a topic of your own (e.g., employment, race, marriage). Write the topic you chose at the top of column 2. Then record in the table how the question(s) changed over time.

Year	Topic: Education What questions were asked?	Topic: _____ What questions were asked?
1900		
2010		

4. What changes did you notice in the question(s) for each topic? What events or trends might have led to these changes?
5. Write a paragraph about which questions you would ask if you were conducting a census. What is important to know about people in the United States?

Home Extension

Take your student worksheet home and share what you learned about the change in questions on the census over time with an adult in your home. Ask them if they participated in the 2010 Census. If not, ask them if they are aware of the 2020 Census coming up and if they have a plan for who will fill it out.



Activity Item: Census Forms Over Time

12-203

TWELFTH CENSUS OF THE UNITED STATES

State

County

Township or other division of county

Name of incorporated city, town, or village, within the above-named division,

SCHEDULE No. 1—POPULATION

(Supervisor's District No.) Sheet No.

(Enumeration District No.)

Enumerated by me on the day of June, 1900, Enumerator

Ward of city,

LOCATION			NAME of each person whose place of abode on June 1, 1900, was in this family State occasion first time living since last mobile birth, if any Indicate every person living on June 1, 1900, other children born since June 1, 1900	RELATION Indicate each person's relation to the head of the family	PERSONAL DESCRIPTION											NATIVITY			CITIZENSHIP			OCCUPATION, TRADE, OR PROFESSION		EDUCATION				REMARKS AT AGE																																																																							
In cities	In towns or villages	In rural places			DATE OF BIRTH		Sex	Color	Age	Married	Single	Widowed	Divorced	Never married	Place of birth of father	Place of birth of mother	Place of birth of person	Naturalized	Citizen	Foreign born	Occupation	Trade	Profession	School	College	University	Other	Remarks																																																																							
					Month	Year																																																																																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Source: U.S. Census Bureau, Historical Census Form, 1900

https://www.census.gov/history/www/through_the_decades/questionnaires/1900_2.html



STATISTICS IN SCHOOLS

D-WS-ST-EN-228

census.gov/schools

**Shape
your future
START HERE >**

United States*
Census
2020

Activity Item: Census Forms Over Time (Cont.)

Use this section to complete information for the rest of the report you created in Question 1 on Slide Seven. (If you call for additional information about forms.)

Person 7							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							
Person 8							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							
Person 9							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							
Person 10							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							
Person 11							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							
Person 12							
Last Name	First Name	Date of Birth	Year	Gender	Married to Person 7?	Yes	No
Sue	Alyc	Apr 01 April 1, 2010	2010	Woman	Day	Yes	No
Female							

ICD SPECIAL USE ONLY

Thank you for completing your official
2010 Census form.

1. You enclosed postage-paid envelope, a handwritten note and your contact form. It was received by the U.S. Customs and Border Protection Center, 1001 East Main Street, Anchorage, AK 99501.

2. You mailed two completed this form, and 1-866-872-6688 between 6:00 a.m. and 8:00 p.m., TDD - 1-866-872-6688 after the closing hours.

3. TDD - Anchorage office closed for the mailing window, Call 1-866-872-6688 10:00 hours, 6:00 a.m. and 8:00 p.m., 7 days a week. The webstore is not live.

4. RECEIVED, ANCHORAGE SI, 1001 East Main Street, Anchorage, Alaska, 99501, Call 1-866-872-6688 10:00 hours, 6:00 a.m. and 8:00 p.m., 7 days a week. The webstore is not live.

5. Please

©2010 Pearson Education, Inc.

UNIT 5: WRITING IN THE COMMUNITY
 Writing for the Public
 Unit 5: Writing for the Public

This is the official form for the people of the nation. It is quick and easy, and your answers are protected by law.

State of New York Statewide Election

How to fill out this form:

1. Circle the name and number every person living in the United States you want to vote for.

2. Before you answer Question 1, read the people living in the United States who are running for office. You will find their names and numbers in the table on page 2.

3. The Capital Bureau also conducts elections in Manhattan and other places.

4. Answer Question 2 only after you have filled in the table on page 2.

5. Do not check anyone in a running race. If you are running for office, you will find your name in the table on page 2.

6. If you are running for office, you will find your name in the table on page 2.

7. If you are running for office, you will find your name in the table on page 2.

8. If you are running for office, you will find your name in the table on page 2.

9. If you are running for office, you will find your name in the table on page 2.

10. If you are running for office, you will find your name in the table on page 2.

11. If you are running for office, you will find your name in the table on page 2.

12. If you are running for office, you will find your name in the table on page 2.

13. If you are running for office, you will find your name in the table on page 2.

14. If you are running for office, you will find your name in the table on page 2.

15. If you are running for office, you will find your name in the table on page 2.

16. If you are running for office, you will find your name in the table on page 2.

17. If you are running for office, you will find your name in the table on page 2.

18. If you are running for office, you will find your name in the table on page 2.

19. If you are running for office, you will find your name in the table on page 2.

20. If you are running for office, you will find your name in the table on page 2.

5. Please provide information for each person living here. Do not write a name that is not on the list. If you are running for office, you will find your name in the table on page 2.

6. If you are running for office, you will find your name in the table on page 2.

7. If you are running for office, you will find your name in the table on page 2.

8. If you are running for office, you will find your name in the table on page 2.

9. If you are running for office, you will find your name in the table on page 2.

10. If you are running for office, you will find your name in the table on page 2.

11. If you are running for office, you will find your name in the table on page 2.

12. If you are running for office, you will find your name in the table on page 2.

13. If you are running for office, you will find your name in the table on page 2.

14. If you are running for office, you will find your name in the table on page 2.

15. If you are running for office, you will find your name in the table on page 2.

16. If you are running for office, you will find your name in the table on page 2.

17. If you are running for office, you will find your name in the table on page 2.

18. If you are running for office, you will find your name in the table on page 2.

19. If you are running for office, you will find your name in the table on page 2.

20. If you are running for office, you will find your name in the table on page 2.

21. If you are running for office, you will find your name in the table on page 2.

22. If you are running for office, you will find your name in the table on page 2.

23. If you are running for office, you will find your name in the table on page 2.

24. If you are running for office, you will find your name in the table on page 2.

25. If you are running for office, you will find your name in the table on page 2.

26. If you are running for office, you will find your name in the table on page 2.

27. If you are running for office, you will find your name in the table on page 2.

Source: U.S. Census Bureau, Historical Census Form, 2010

https://www.census.gov/history/www/through_the_decades/questionnaires/2010_overview.html



Name: _____

Date: _____

Taking Action: Census 2020

Create a public service announcement(PSA) to communicate the importance of being counted during the 2020 U.S. Census. Be sure to include when the census will be happening, how people can complete it, and two other pieces of information about the census that will grab the attention of your audience!

Guiding Question: Why is the 2020 Census important to my family and community?

Possible PSA formats: Poster, Infographic, Video, Audio, Digital PSA (video, audio, multimedia)

DRAFT

(If creating a print PSA, use the following page as a final copy.)

Plug into Power

WITH THE U.S. CENSUS

The number of members a state has in the House of Representatives and the amount of money a state gets from the federal government are based on that state's population. Completing the census survey can plug your community into valuable resources.

HERE'S HOW IT WORKS!

U.S. GOVERNMENT
RECEIVES
POPULATION DATA
FROM THE
CENSUS BUREAU

STATES ARE
ASSIGNED SEATS
IN THE HOUSE BASED
ON POPULATION

INDIVIDUAL
COMPLETES
THE U.S. CENSUS

YOUR COMMUNITY
RECEIVES
SERVICES FUNDED
BY THE STATE



STATES ARE
ASSIGNED
ELECTORAL
VOTES

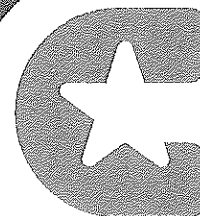
STATES GET A
PORTION OF THE
FEDERAL BUDGET TO
FUND SERVICES

Medical Assistance - \$311b
School Lunch Program - \$18b
Assistance for Needy Families - \$17b
Medicare - \$70b
Federal Pell Grant - \$29b

**BILLIONS
OF DOLLARS
ARE DISTRIBUTED
BASED ON
CENSUS DATA
EACH YEAR**

Housing Vouchers - \$15b
Special Education Grants - \$11b
Schools - \$14b
SNAP - \$71b
Roads - \$38b

Numbers taken from the Uses of Census Bureau Data in Federal Funds Distribution, U.S. Census Bureau 2017



Visit [ICivics.org](https://www.icivics.org) to
download our Citizenship
and Participation Unit

.....

6

7

8