Student Name:
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### WVES 4<sup>th</sup> Grade Packet Academic Homework Calendar

Week of: May 5- May 11

Theme: How do traditions connect people?

No.to		A _LiiLi		
Date	Danding David	Activities		
Tuesday, May 5		er 1 and answer questions		
	Writing: Complete D	•		
		igit Multiplication (Vertical)		
	Math Booklet Questi			
	Science: Electrical C	harges		
Wednesday, May 6	Reading: Read chapte	er 2 and answer questions		
	Writing: Complete D	ay 2		
	Math: 3 Digit by 1 D	igit Multiplication (Vertical)		
	Math Booklet Questi	ons #49-#51		
	Science: Conductors	and Insulators		
Thursday, May 7	Readina: Read chapte	er 3 and answer questions		
	Writing: Complete D	•		
	<u> </u>	•		
	Math: 4 Digit by 1 Digit Multiplication (Vertical)  Math Booklet Questions #52-#54			
	Science/Social Studies: Series & Parallel Circuits			
	Science/Social Studies: Series & Parallel Circuits			
Friday, May 8	Reading: Read Penob	scot Nation and answer questions		
	Writing: Complete D	ay 4		
	Math: 2 Digit by 2 D	oigit Multiplication (Vertical)		
	Math Booklet Questi	ons #55-#57		
	Science: Series and Parallel Circuits			
Monday, May 11	Reading: Read fluence	cy passage twice and complete chart in part B.		
	Writing: Complete D	ay 5		
	*Possible to type in Google Classroom			
	Math: 2 Digit by 2 Digit Multiplication (Vertical)			
	Math Booklet Questions #58-#60			
	Science: Electricity Quiz			
	,	`		
W. 1 (000)		nline Options		
Wonders (Official	<i>J J</i> ,	ReadWorks (Reading-Google Classroom)		
Into Math (Offici	<del>-</del>	SpellingCity (Spelling and Vocabulary Words)		
Prodigy (Mar				
ATTA MATTI (BUSIC FO	th (Basic Facts- Math Program)			

#### STRATEGIES & SKILLS

#### Comprehension

Strategy: Reread Skill: Theme

#### Vocabulary Strategy Connotation and

Denotation

#### Vocabulary

ancestors, despised, endurance, forfeit, honor, intensity, irritating, retreated

#### **Content Standards** Social Studies

History

Word Count: 1,798\*\*

\*\*The total word count is based on words in the running text and headings only. Numerals and words in captions, labels, diagrams, charts, and sidebars are not included.



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ISBN: 978-0-07-673771-0 MHID: 0-07-673771-3 Printed in the United States.

Genre Preview:

2 3 4 5 6 7 8 9 10 11 12 DOC 19 18 17 16





by Lee DeCora Francis Penobscot/HoChunk illustrated by Anna Vojtech



Chapter 1 Muhmum's Words2	
Chapter 2 Baskets	
Chapter 3 New Shoes	
Respond to Reading	
PEAD Penobscot Nation	

This story is an historical fiction story. Historical fiction is a made-up story that takes place in the past. It includes realistic characters, events, and settings. The story may include real people and actual events from the past.

#### Note Taking:

Take notes as they read.

Remember to record:

- ideas they think are important
- unfamiliar words
- sections of text that are unclear or confusing
- any questions about the text they have Students can also fill in a graphic organizer, noting the important events for each section.

# Muhmum's Words

It was early morning on a summer day in 1960. Doonk! Doonk! Doonk! Rodney's eyes slowly opened as a small grin appeared on his face. He lay listening to the familiar sound that signaled it was time to begin his day. Sliding gently out of bed, he quietly grabbed his clothes, looked at his sleeping brothers, and tiptoed to the stairs. He splashed cool water on his face and brushed his teeth before heading out into the yard. His grandfather, Muhmum, was already hard at work. His grandmother, Nokomis, was busy scrubbing laundry on the washboard but stopped to give Rodney his hug as she did every morning.





Long strips of ash tied in bundles were piled near the entrance to the shed. Freshly cut ash trees waited along the riverbank for their turn. It was a beautiful sight and almost made Rodney forget his worries. He reached the area where he worked with Muhmum and sat on one of the logs that lined the shed.

Doonk! Doonk! Doonk! Rodney watched his grandfather raise the blunt side of the axe again, pounding the mark he made on the log. Muhmum glanced up. The intensity of Rodney's gaze told him that something was wrong. He put down his axe and rested on the log next to his grandson.

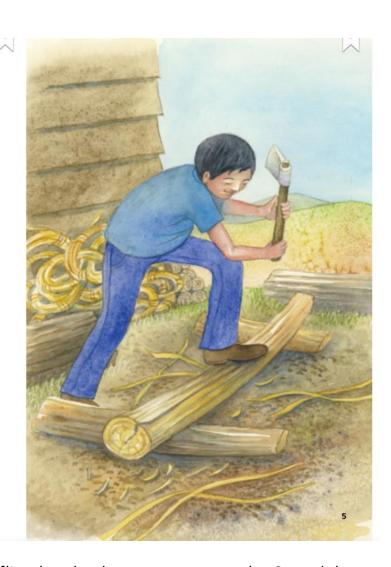
3

1.	How is this story an example of historical fiction?		

Muhmum knew Rodney was worried about leaving the reservation for school in the fall. It would be the first time he attended a school that wasn't full of his own people. Muhmum placed his hand on Rodney's shoulder and smiled. He reminded his grandson that he wouldn't be going far. The school was in the neighboring town just across the river. He'd be able to

come home every afternoon.

They sat for a few moments more and soon Rodney held the axe in his hands. He took his spot next to the log and pounded it with the back of the axe like his grandfather taught him. With each swing, he thought about his Muhmum's words. When his grandfather was a boy, he had to go to a school far from home and wasn't able to return until he was older. At the school, he wasn't allowed to speak his language or play with his relatives. Rodney knew his school would be different but he still wished he could stay home and make baskets.



4

2. Fictional stories usually have a problem or conflict that the characters try to resolve. Reread the first paragraph on page 4. What is the problem or conflict in this story?

 Review the second paragraph on page 4. How will Rodney's experience with school be different from his grandfather's? Use text evidence.

\_\_\_\_\_

\_\_\_\_\_\_

4. Why does Muhmum share his experience of attending school with Rodney? Use details from the text to support your answer.

\_\_\_\_\_

# Chapter 2 Baskets

Most boys Rodney's age helped prepare the ash to make baskets. While Rodney continued to pound the ash, he remembered how difficult it was when he first started. But it was an important job, one he needed to learn how to do for his people. Everyone worked together, young and old, to survive. Many supported their families with the art and knowledge of making baskets. Some families focused on making larger, sturdier baskets that people used for more difficult work. Others focused on the smaller, fancier baskets that tourists liked to collect.

Rodney's family made all types of baskets. Both of his parents helped make baskets in the evenings after working in the factory sewing shoes. His grandmother often gathered with other women. They would work on their baskets all day. Each woman had her own particular style. Rodney's grandmother liked adding curls to her work, while her friend made points with the small strips of ash. Another woman added color to her baskets.

Rodney's grandfather made bigger baskets, as did many other men on the island. He made laundry baskets, potato baskets of all sizes, and pack baskets. His pack baskets were the best, and Rodney wanted to make packs just like his.



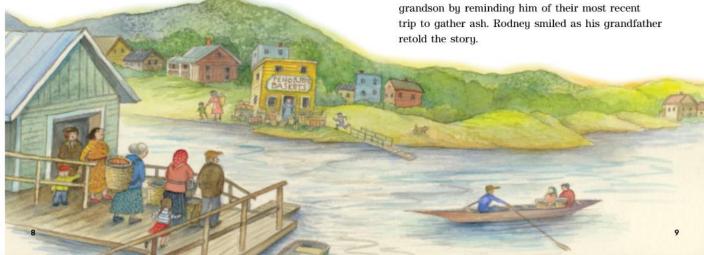
5. Why are the baskets so important to him, his family, and his community?

All week, Rodney helped his grandfather pound and split ash. There would be plenty for the baskets. More and more tourists took the ferry across the river now to buy baskets at the Penobscot Indian Basket Shop. Rodney's family had worked carefully making sure there were plenty of baskets. They placed some at the basket shop, and they sent many to the coast for other family members to sell.

Rodney wondered about the people that bought those baskets. He thought about all the places their baskets might travel. He knew that his family needed to make more for the fall, and he worried about how his grandfather would keep up once he started school. Rodney admired the way his grandfather Muhmum moved through his workshop. Paths had been worn into the floor. Every item had its place. His little brothers were not allowed into the workshop most of the time. Rodney was thankful for this because he found them irritating.

As a young boy, Rodney loved to sit on a stool and watch the baskets take form. He was fascinated at the way the strips went together. As Rodney grew older, Muhmum asked for his assistance, showing him how to construct the baskets.

Today, the two worked side by side. They placed basket bottoms onto wooden blocks that would help give them the right shape. Muhmum teased his grandson by reminding him of their most recent trip to gather ash. Rodney smiled as his grandfather roted the story.



make? Use details from the text to support your answer.	•

6. Why does the author mention the different kinds of baskets various members of the community

7. On page 9, what is the denotation of fascinated? What is the connotation?





They had one log left to carry to the shore. Rodney bent down, reached under the tree, and hoisted it onto his shoulder. He felt something move along his neck and down his chest. He looked at the ground and screamed at the sight of a brown snake. He retreated from the woods as quickly as possible. There wasn't much that scared Rodney, but snakes definitely did. He despised them.

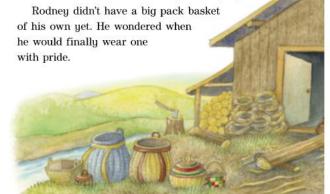


#### Chapter 3

### **New Shoes**

The next day was spent weaving the baskets that sat waiting in the corner. Rodney loved weaving—he was especially skilled at it. Often, other men from the family would lend a hand. It was during these times that Rodney learned about his relatives through the stories they shared.

Many had left the reservation as young men. They had lied about their age to join the Army because they wanted to protect their homelands. His cousins, Claude and LeRoy, were both sixteen when they left for Korea. He listened closely and pictured the stories in his mind. Rodney realized that each basket held the history of his people.



8. Reread the second paragraph on page 11. References to the Army and Korea are in regards to the Korean War, a conflict between North and South Korea lasting from 1950 to 1953 in which the United States was also involved. Which details in this paragraph are facts and which ones are made up by the author? How does the reference to the Korean War help you confirm this story is historical fiction?

When Rodney was a little boy, his grandfather would carry him on his back in a pack basket. Once he asked his grandfather if he would fall through. Muhmum replied, "Packs are strong like the endurance of our ancestors. It will hold you."

Rodney's favorite of his grandfather's packs was the one he rode in as a young boy. It had been painted a light blue many years ago. Some of the color had faded, but it was still Rodney's favorite.



The Saturday before school, Rodney came downstairs and greeted Nokomis. Two slices of toast waited for him at the table next to a cup of tea. Nokomis ate breakfast and talked about her plans for the day. She asked Rodney to go into town with her.

12



The Landing was busy that morning. People waited for the ferry with goods in hand. Canoes lined both shores.

At the store, Nokomis held a crisp, white shirt to Rodney's chest. Next, they found a proper pair of pants to fit his long legs. His grandmother then selected a pair of shiny leather shoes. Rodney knew she'd have to forfeit something she needed in order to buy the shoes. Rodney suggested a different pair, but his grandmother insisted on the shoes she held in her arms. She needed her grandson to look handsome at his new school. On the way home, Rodney wondered how he might pay her back.

Sunday night, Rodney tried not to think about starting school the next day. *Tomorrow will be fine*, he thought. He'd been in town many times before. Last year, he went with his grandmother when his people were finally allowed the right to vote. He knew the town's people, and that was what bothered him. Some people there treated him differently because he was Penobscot. *You can do this. You can do this. You will do this*, he told himself as he settled into bed.

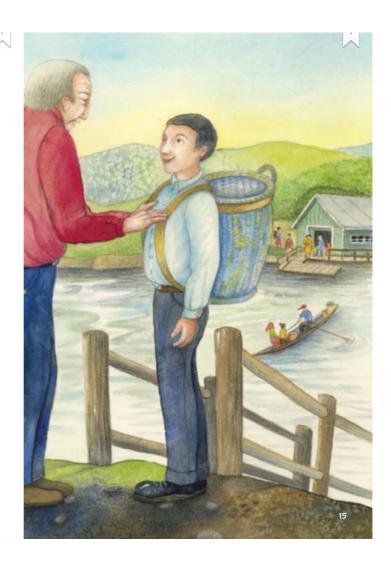
13

9. Has Rodney's problem been solved? If so, how was it solved?

10. Why is learning to make baskets important to Rodney?

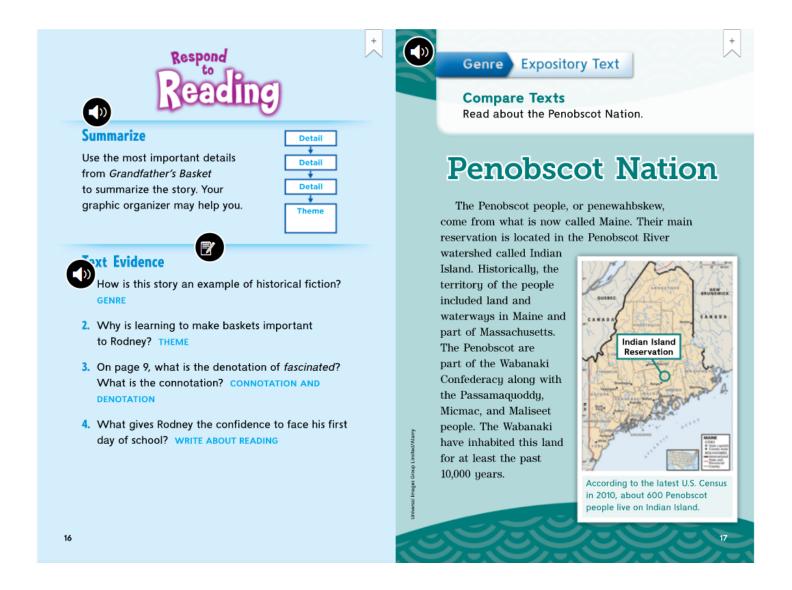
Rodney looked at himself one more time before leaving. He strolled down the road toward the ferry. At the dock, he found his cousin waiting for her first day of school to begin too. They talked and laughed as they waited for the ferryman to arrive. Soon, he felt a familiar hand on his shoulder. He turned to see Muhmum smiling at him. Muhmum took off his pack and handed it to his grandson.

His grandfather adjusted the straps, saying, "This is your pack now. I've had this pack for many years. It's traveled with me to many places. No matter where I went, it connected me to home. That's what it'll do for you too." Rodney hugged his grandfather and thanked him. Then he climbed into the boat. Rodney wore the pack with honor. He felt the strength from his grandfather's basket against his back. He looked across the water to see his grandfather still standing on the shore watching him. Rodney waved goodbye before starting up the hill toward the school.



14

11.	the text to support your answer.



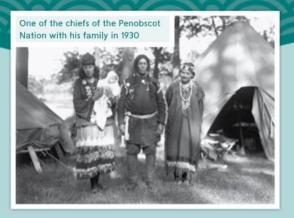
13. How does the informational text help you better understand Rodney's story? What details in the

12. What gives Rodney the confidence to face his first day of school?

Have partners discuss their ideas, using text evidence from both the story and the article.

informational text give you more information about what life was like for Rodney and his community?

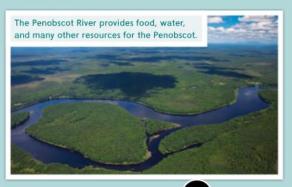
\_\_\_\_\_



The Penobscot people, along with other Wabanaki, had a deep knowledge of the waterways and land. They built and lived in sophisticated villages. They traveled freely throughout their homelands using their understanding of resources and seasonal changes. Today, the Penobscot still have that knowledge, but a much smaller land base. The people still carry on the traditions of their ancestors.

The Penobscot Nation also has a very old, independent government. Tribal leadership consists of a chief, vice chief, tribal council, and a tribal representative. The Nation has many important programs and departments such as education, healthcare, natural resources, and elder and youth services.

Every aspect of the Penobscot culture was and still is connected to the Penobscot River. The river is extremely important to the tribe. The Penobscot Nation focuses a lot of attention on protecting this body of water and its tributaries. There are many islands located within the river itself that are part of the tribe's reservation lands. The health of the water directly affects the health of the people and their culture. The Penobscot River is easily their most precious resource.



3

#### **Make Connections**

Why is the Penobscot River important to the Penobscot Nation? ESSENTIAL QUESTION

What is a Penobscot tradition that Rodney learned from his grandfather? TEXT TO TEXT

18

1

14. Why is the Penobscot River important to the Penobscot Nation?				
15. What is a Penobscot tradition that Rodney learned from his grandfather?				
15. What is a Penobscot tradition that Rodney learned from his grandfather?				

10

21

35

49

60

68 73

85

95

102

113

115

125 140

144

152

164 179

191

202

214

217

225

Read the passage. Use the reread strategy to understand difficult parts of the text.

#### The Generation Belt

Kanti snuck behind her village's circle of wigwams. One Algonquin family was repairing their home with fresh birch bark strips. Kanti stayed in the shadow of the trees until she reached the lake. She could see her father's sleek canoe far off in the distance. He was fishing for their dinner. Her cousins were splashing merrily near the shore and waved to her. She stepped into the water.

"Kanti!" an irritated voice said.

Kanti felt her heart drop to her stomach. She was caught. Kanti's mother walked quickly toward her. "Kanti, you know that your grandmother is going to teach you today."

"It's so steamy outside. Why can't I swim with my cousins?" she whined.

Her mother looked sympathetic, but firm. "Sometimes we have to set aside play so we can learn. Come, I think you will like this lesson better than you predict."

Kanti's grandmother looked dignified sitting cross-legged in the center of their wigwam. Around her lay wide beaded belts of white and purple with all kinds of vivid designs. In front of her was a loom shaped like an archer's bow with a few rows of beads strung.

"Thanks for coming, Kanti." There was a mischievous glint in her grandmother's eye. She held a few small purple beads. "Do you know what these are?"

"That's easy, they're wampum." Sometimes Kanti would help collect the quahog, or clams, the beads were made from.

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"I actually meant, what do the beads stand for?" Kanti's grandmother said. "Here, let me show you."

She held out one of the most elaborate belts for Kanti to see. The purple beads made a pattern of triangles on the right side. On the left side, two figures stood holding hands next to a wigwam. "These people are your great-great grandmother and grandfather," she said. "They traveled over the mountains to find a place to settle." She

traced the triangles with her fingers, stopping at one with the outline of a majestic bird hovering over it.

"Your great-great grandmother saw an eagle that led them through the mountains."

A circle at the edge of the mountains represented the lake that fed the village. "When they found a wide lake, they knew it would support many people. This is how our village began."

Despite herself, Kanti was drawn in by the story the belt portrayed. Suddenly, the belts' patterns jumped out at her, all holding adventures of their own. She looked at the loom with a scant five rows completed. "What story will this belt tell?" she asked.

"This belt will tell your story," her grandmother said. "I started it for you and you can continue to add to it as you grow." With that, her grandmother carefully stacked the belts and left.

Kanti immediately set to work, concentrating on finding just the right shades of purple wampum before stringing together rows. The purple beads became a figure about to leap into a calm lake. She couldn't wait for her cousins to come back so she could show them her new belt.

Name	nprehension: Theme and Fluency
A. Reread the passage and answer the question	ons.
1. Why can't Kanti swim with her cousins?	
2. What does Kanti learn about the belts?	
3. What is the theme of this story?	

B. Work with a partner. Read the passage aloud. Pay attention to rate and accuracy. Stop after one minute. Fill out the chart.

	Words Read	_	Number of Errors	=	Words Correct Score
First Read		-		=	
Second Read		_		=	

### Writing/Grammar Activities Checklist Week of May 4th

A biography is a true story about someone's life. They can be about famous people or ordinary people. This week you will conduct an interview of a family member and write a biography about them using the information collected!

#### Day 1 (Grammar):

- Read about Adjectives That Compare in the box at the top of page 111
- Complete Color the Adjective first, Comparing Adjectives second, and finally complete #1-10 on page 111.

#### Day 2 (Prewrite):

- Choose any family member to interview. It may be completed in person or over the phone. Use the Interview with a Family Member worksheet to write your answers down.

#### Day 3 (Draft):

- Use the 3 paragraph outline to write your complete sentences. You don't have to include the answer for every question on the prewrite worksheet. Pick your favorites, but make sure to have an introduction, body details, and a conclusion

#### Day 4 (Revise and Edit):

- Reread your paragraph(s). Are there any ideas or words you should change or add? Try to include comparative or superlative adjectives to describe your family member
- Check for correct capitalization, punctuation, and spelling

#### Day 5 (Publish)

- Use the lined paper with the box to write your final copy in your nicest handwriting.
- Draw a picture of the family member you interviewed in the box.
- Read your biography to someone!

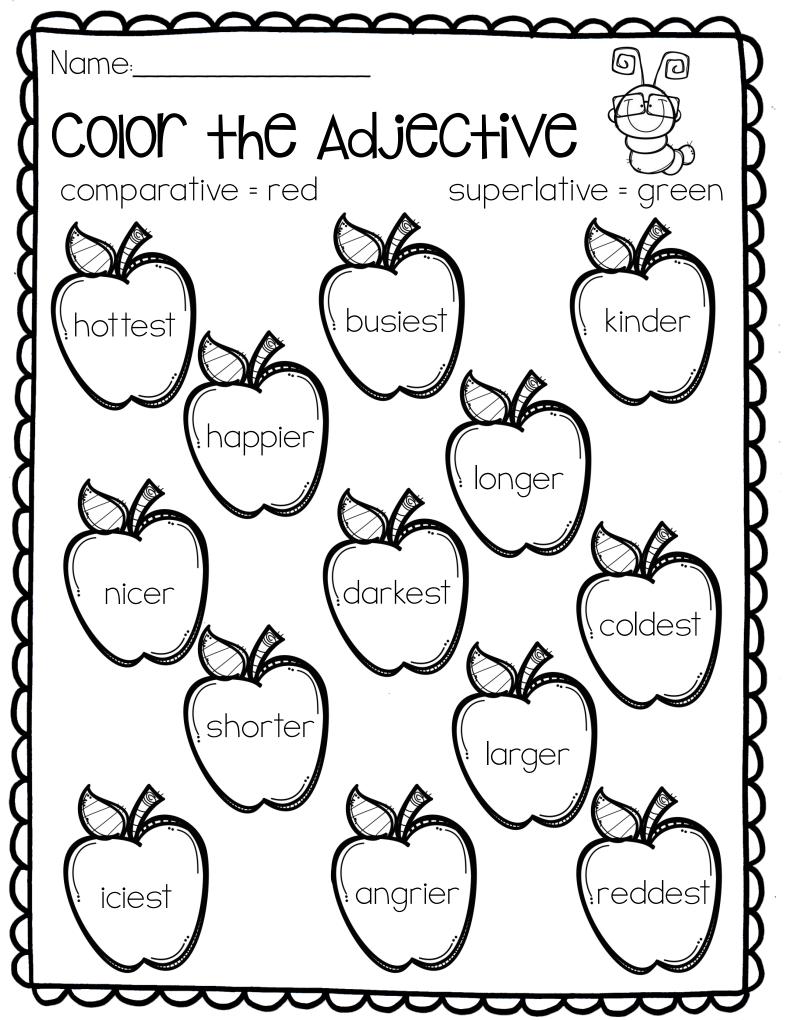
#### \*Extensions\*

- Underline any comparative or superlative adjectives in your final copy.
- Watch the biography about Walt Disney and Thomas Edison below:
   <a href="https://www.youtube.com/watch?v=WUGwSKKUA7M">https://www.youtube.com/watch?v=WuGwSKKUA7M</a>
   <a href="https://www.youtube.com/watch?v=KgSi">https://www.youtube.com/watch?v=KgSi</a>
   R1Wcyk

- **Comparative adjectives** compare two things. They usually end in *-er* or include the word *more* or *less*.
- Superlative adjectives compare more than two things. They usually
  end in -est or include the word most or least.

## Complete each sentence by circling the correct comparative or superlative adjective in parentheses.

- 1. My hair is (longer, longest) than yours.
- **2.** This flower is the (prettier, prettiest) of all of them.
- **3.** The turtle in the back is the (slower, slowest) in the group.
- **4.** My father is (stronger, strongest) than I am.
- 5. This lake is the (more, most) peaceful place I have ever been.
- 6. I am (happier, happiest) to go here than my brother is.
- 7. It is (less, least) sunny today than yesterday.
- 8. The summer is (warmer, warmest) than the winter.
- 9. This is the (heavier, heaviest) piece of furniture in the house.
- **10.** She is the (smarter, smartest) girl in our school.



# comparing Adjectives

	Adjective	Comparative	Superlative
	clean		
2		wiser	
3			simplest
4		bigger	
5			strongest
6	brave		
7	blue		
8			largest
q	heavy		
Ю		smaller	
II	good		

### Interview with a Family Member!

Choose any family member to conduct an interview with. This interview can be completed in person or over the phone. Write down the complete answer so that you have the correct information to include in your biography. YOU need to write down the answers, not the person being interviewed.

What is your name?	<del></del>				
Were you named after someone else?					
How are we related?					
Do you have a nickname? Wh	no calls you that?				
What is your job?					
What do you do at your job?					
When is your birthday?	<del></del>				
Where did you grow up?					
What high school did you go to?	When did you graduate?				
Did you go to college? If so, where and what major?					
Who did you live with growing up?					
Do you have a funny story from your childhood you could tel then just make some quick notes so that you'll remember son	me details later)				
When you were my age, what was your favorite thing to do?					
Did you have a favorite toy?					
Who was your favorite teacher and why?					
What subject in school was the easiest for you? Why?					

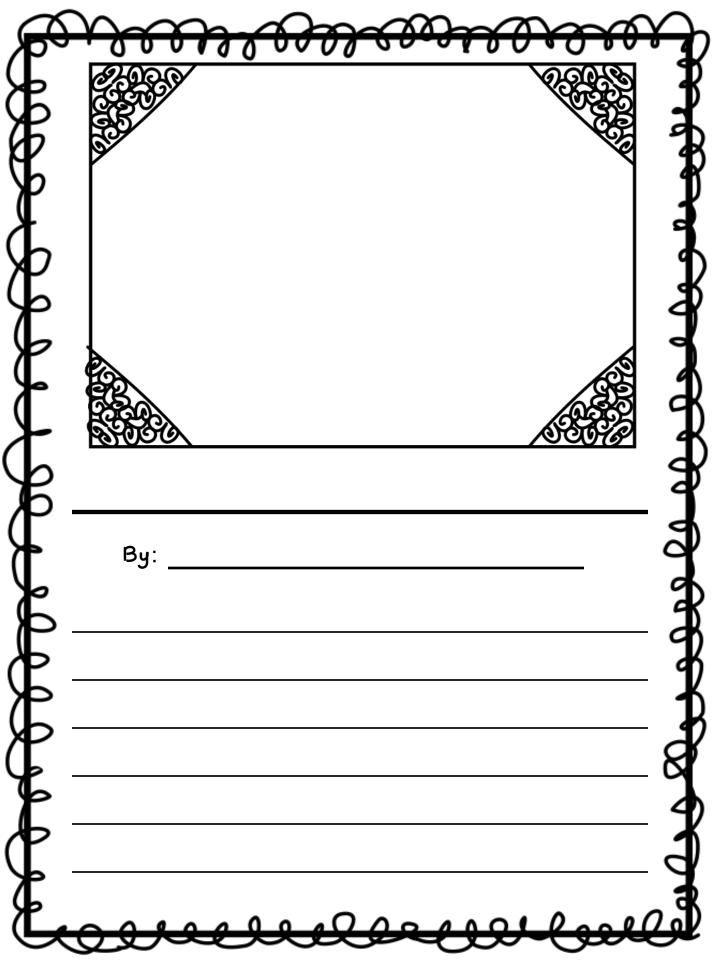
What subject was the hardest for you? Why?	
As a child, what did you want to be when you grew up?	
Did you have any pets growing up? Any stories about them?	
What is your favorite	
Food?	
Sport?	
Sports Team?	
Book?	
Animal?	
Singer/band?	
Color?	_
Hobby?	
Do you have any suggestions for how I can be successful in school this year?	
Anything else you would like me to include in my writing about you?	

Do you have a picture I can have of you (better yet, of me AND you!) that I can use for my biography? This is optional!

### 3 Paragraph Essay Outline

Introduction	
Thesis	
1110010	
<b>Body Paragraph</b>	
	`
Conclusion	

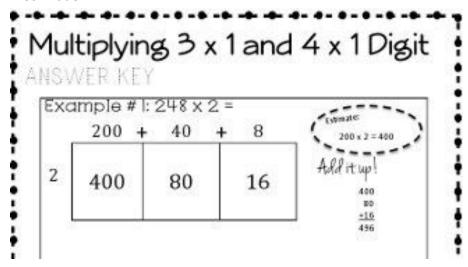
Freeology.com - Free School Stuff



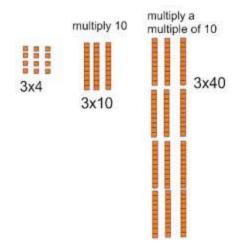


Here are some strategies to help with the multiplication problems that are 1 digit by 2,3,4 digits

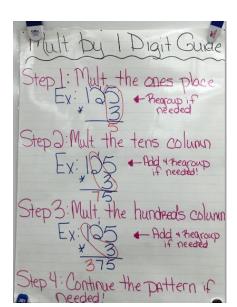
#### 1. Area Model



#### 2. Base Ten Blocks

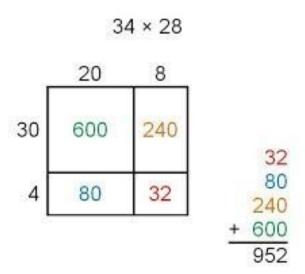


#### 3. Standard

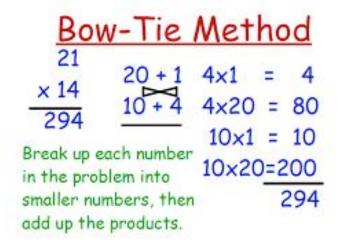


Here are some strategies to help with the multiplication problems that are 2 digit by 2 digit

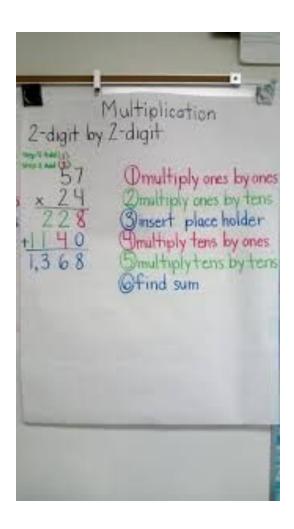
#### 1. Area Model



#### 2. Bow-Tie Method



#### 3. Standard





Name:

Solve each problem.

1) 93

**2)** 71

3) 64

4) 19 × 9

**Answers** 

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

2.

3.

4.

5. \_\_\_\_\_

6.

\_\_\_\_\_

9

10. \_\_\_\_\_

5) 32 × 7 6) 88

7) 75 × 6

8) 65 × 5

9) 22

10) 79 × 9

www.CommonCoreSheets.com



Name:

Solve each problem.

1) 823 2) 537

251

4) 107

**Answers** 

5) 289

**6**) 439 **7**) 187

8) 815

9) 178 10) 829

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Name:

Solve each problem.

1) 9,284 **2**) 3,824 **3**) 2,401

4) 1,692

**Answers** 

**5**) 5,131 **6**) 7,080 **7**) 6,969 **8**) 8,507

<u>× 6</u> <u>× 8</u> <u>× 7</u>

**9**) 5,902 **10**) 6,081 × 8

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Name:

Solve each problem.

1) 98 × 15 2) 51 × 51 3) 78 × 38 4) 59 × 23 **Answers** 

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

2.

3.

4.

5. \_\_\_\_

6. \_\_\_\_\_

8.

9.

0. \_\_\_\_

5) 40 × 32

6) 30 × 92

7) 31 × 85 8) 82 × 89

9) 17 × 26 10) 89 × 56



Name:

Solve each problem.

1) 80 21 ×

2) 75 85 ×

3) 60 61 ×

4) 34 82 **Answers** 

5) 22 93 ×

96

76

**6)** 40 59 ×

7) 71 78 ×

8) 63 47 ×

×

9)

10) 49 × 20 Name: \_\_\_\_\_

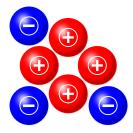
### **Electrical Charges**

If an object has more positive charges (1991) than negative charges ( ), its electrical 

If an object has more negative charges ( ) than positive charges ((1)), its electrical charge is negative ( ).

If an object has the same number of positive (1) and negative (1) charges, it has no electrical charge or is neutral.

Example:



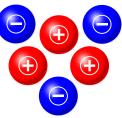
Electrical charge: positive charge

Count the positive and negative charges in each picture. Write positive charge, negative charge, or no charge on each line.

1.

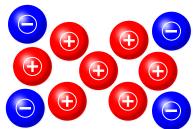


2.



electrical charge: \_\_\_\_\_

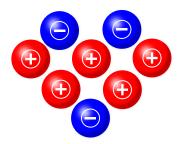
3.



electrical charge: \_\_\_

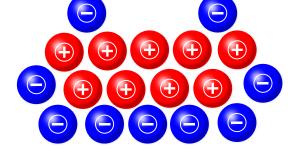
electrical charge: \_\_\_\_\_

4.

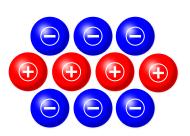


electrical charge: \_

5.



6.



electrical charge: \_\_\_\_\_ electrical charge: \_\_\_\_\_

### **ANSWER KEY**

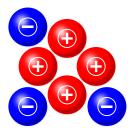
### **Electrical Charges**

If an object has more positive charges (1991) than negative charges ( ), its electrical charge is positive (1991).

If an object has more negative charges ( ) than positive charges (19), its electrical charge is negative ( ).

If an object has the same number of positive (1) and negative (1) charges, it has no electrical charge or is neutral.

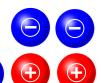
Example:



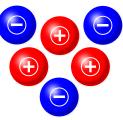
Electrical charge: positive charge

Count the positive and negative charges in each picture. Write positive charge, negative charge, or no charge on each line.

1.

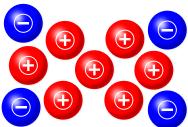


2.



electrical charge: negative charge

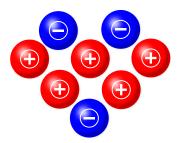
3.



electrical charge: \_\_\_\_

no charge

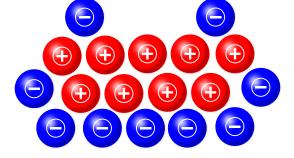
4.



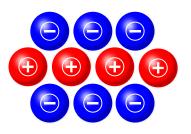
electrical charge: **positive charge** 

electrical charge: **positive charge** 

5.



6.



electrical charge: <u>no charge</u>

electrical charge: negative charge

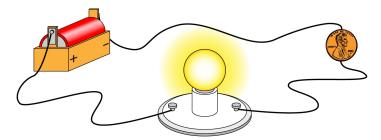
Name:
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### **Conductors and Insulators**

A **conductor** is a material that allows electricity to flow through it.

An **insulator** is a material that electricity cannot flow through.

To determine whether an object is a conductor or insulator, you can build a simple circuit with a battery, light bulb, and three pieces of wire.



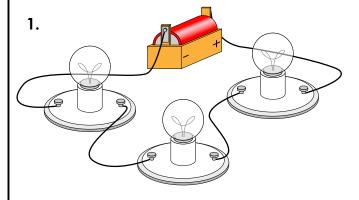
Touch the free ends of the wire to the object you are testing. If the light bulb lights up, the object is made from a conductor. if it does not, the object is made from an insulator.

Complete the table. Predict whether each item is made from a material that is a conductor or insulator. Then test each item to determine if it is made from a conductor or insulator.

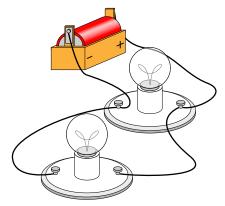
Object	Prediction: Conductor or Insulator?	Result: Conductor or Insulator?
rubber band		
penny		
nickel		
toothpick		
key		
paper clip		
brass paper fastener		
glass microscope slide		
(your choice)		
(your choice)		

### **Series & Parallel Circuits**

Tell whether each picture shows a **series circuit** or **parallel circuit**.



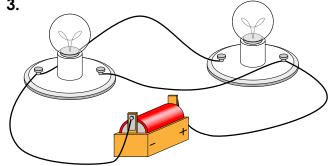
2.

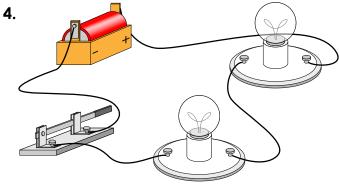


type: \_\_\_\_\_

type: \_\_\_\_\_

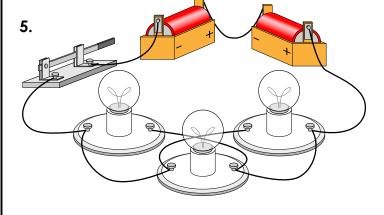
3.

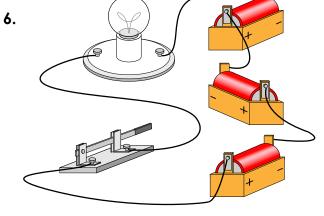




type: \_\_\_\_\_

type: \_\_\_\_\_



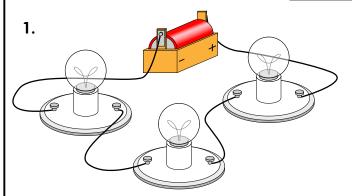


type: \_\_\_\_\_

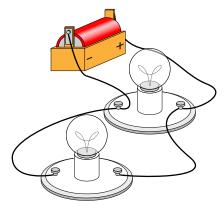
### **ANSWER KEY**

### **Series & Parallel Circuits**

Tell whether each picture shows a **series circuit** or **parallel circuit**.

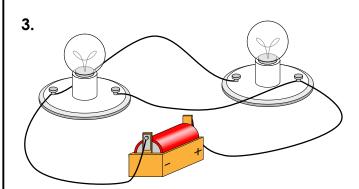


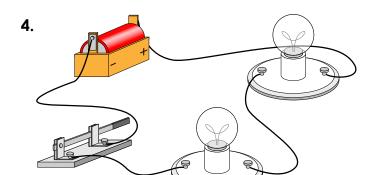
2.



type: series circuit

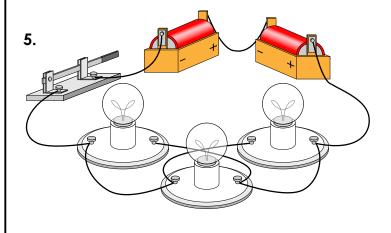
type: parallel circuit

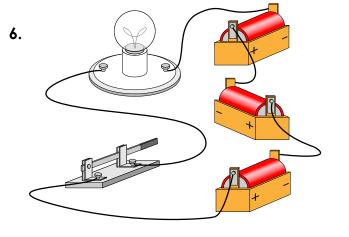




type: <u>parallel circuit</u>

type: series circuit



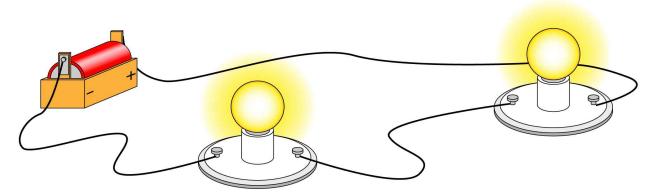


type: series circuit

### **Series and Parallel Circuits**

In a <u>series circuit</u> electricity has only one path to follow. All parts are connected one after another. Electrons flow from the negative side of the battery around in a loop to the positive side.

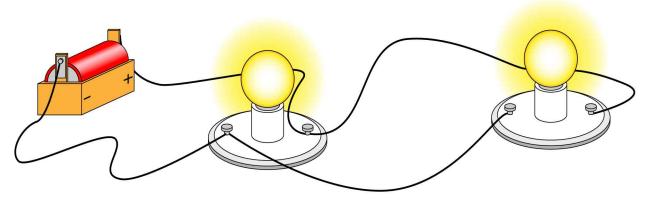
Draw arrows to show the path the electrons move in this series circuit.



If a light bulb is missing or broken in a series circuit, will the other bulb light? Explain.

In a **parallel circuit**, electricity has more than one path to follow. Electrons can follow different paths as they flow from the negative side of the battery to the positive side.

Draw arrows to show the different paths electrons can travel in this parallel circuit.



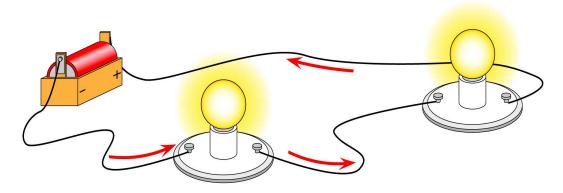
If a light bulb is missing or broken in a parallel circuit, will the other bulb light? Explain.

### **ANSWER KEY**

### Series and Parallel Circuits

In a <u>series circuit</u> electricity has only one path to follow. All parts are connected one after another. Electrons flow from the negative side of the battery around in a loop to the positive side.

Draw arrows to show the path the electrons move in this series circuit.

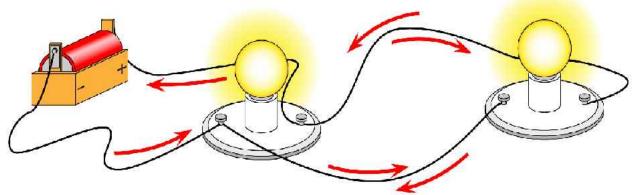


If a light bulb is missing or broken in a series circuit, will the other bulb light? Explain.

No because the path the electricity needs to follow is broken.

In a **parallel circuit**, electricity has more than one path to follow. Electrons can follow different paths as they flow from the negative side of the battery to the positive side.

Draw arrows to show the different paths electrons can travel in this parallel circuit.



If a light bulb is missing or broken in a parallel circuit, will the other bulb light? Explain.

Yes because the electricity can travel along a different path and avoid the broken bulb.

Name:	

### **Electricity**

Choose the best answer for each question. Write the letter on the line.

- 1. What supplies energy in an electric circuit?
  - **a.** a conductor

b. light bulb

c. a wire

**d.** a battery

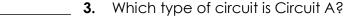


**a.** plastic

**b.** silver

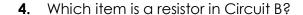
c. glass

d. wood



**a.** series

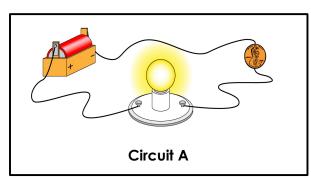
- **b.** parallel
- **c.** perpendicular
- d. current

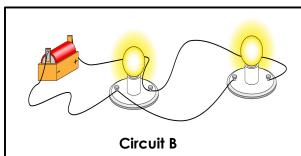


- **a.** light bulb
- **b.** wire

**c.** battery

d. screws





- 5. Why did the person who made Circuit A probably connect the wires to a penny?
  - **a.** They needed to use a penny to make the bulb light.
  - **b.** They were testing to see if the penny conducts electricity.
  - **c.** They used the penny to supply extra power.
  - **d.** The penny will prevent sparks.

6. Which of these could be used as a resistor in a circuit?

- a. a pencil
- b. a gas engine
- c. a rubber eraser
- d. an electric motor

### **ANSWER KEY**

### **Electricity**

Choose the best answer for each question. Write the letter on the line.

- d 1. What supplies energy in an electric circuit?
  - **a.** a conductor

b. light bulb

c. a wire

d. <u>a battery</u>

- **b** 2. Which material is a conductor?
  - **a.** plastic

b. silver

c. glass

d. wood

- **a** 3. Which type of circuit is Circuit A?
  - a. series

**b.** parallel

c. perpendicular

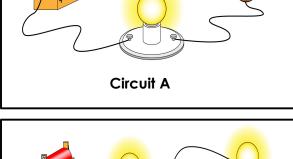
d. current

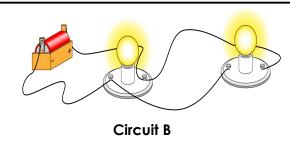
- **4.** Which item is a resistor in Circuit B?
  - a. <u>light bulb</u>

**b.** wire

**c.** battery

**d.** screws





- **5.** Why did the person who made Circuit A probably connect the wires to a penny?
  - a. They needed to use a penny to make the bulb light.
  - b. They were testing to see if the penny conducts electricity.
  - c. They used the penny to supply extra power.
  - d. The penny will prevent sparks.
- **d** 6. Which of these could be used as a resistor in a circuit?
  - a. a pencil
  - b. a gas engine
  - c. a rubber eraser
  - d. an electric motor