

**6th Grade**  
**10 Day Independent**  
**Study Packet**

<b>ELA</b>	Lexia Close Reads - each close read will take two days to complete.  <b>Day 1</b> Read the key vocabulary. Read the passage. Complete one to two tasks for the passage.  <b>Day 2</b> Reread the passage and complete the remainder of the tasks for the passage.
<b>Writing</b>	Lexia Writing Prompts - Each writing prompt will be worked on for two days.  <b>Day 1</b> Read the prompt. Brainstorm writing and begin writing.  <b>Day 2</b> Complete writing and use Student Checklist on writing.
<b>Math</b>	Complete one math Sprint each day.

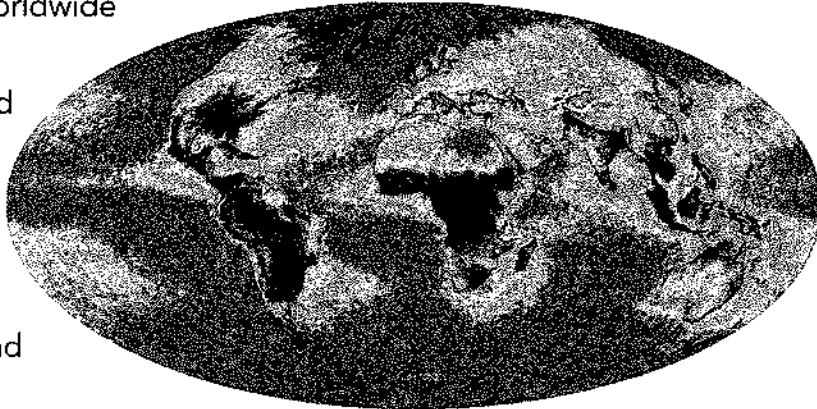
**ELA**

# WHEN LIGHTNING STRIKES

Imagine two huge lightning bolts **simultaneously** strike the tips of two skyscrapers. Impossible? Well, just such a thing happened in Chicago in 2010, and one photographer was lucky enough to capture the spectacular moment. But then, lightning flashes often have a way of being highly dramatic.

Most of us don't see many lightning flashes in a year, but don't be fooled. According to recent satellite data, over three million lightning flashes occur worldwide every day. Most

travel from cloud to cloud, but about 860,000 of them strike either the ground or some water surface on Earth.



Places where the most lightning strikes occur are shown in deep red.

Lightning travels at the speed of light, which is 186,282 miles per second (299,792,458 meters per second). The reason the thunder we hear trails far behind the lightning we see is that the speed of sound is **comparatively** slow. It takes five seconds just to travel a mile in warm summer air. This difference in speeds provides a quick way of estimating how close an electrical storm is. As soon as you see a lightning flash, start counting seconds (*one thousand and one, one thousand and two*). Stop when you hear the thunder, and divide by five to get the number of miles.

As enjoyable as lightning is to watch, it can do tremendous damage. Lightning strikes are the major cause of forest fires and frequently cause power **outages**. A lightning strike in northern New York caused a blackout that **paralyzed** New York City in 1977. More importantly, about 24,000 people are killed by lightning every year. Ten times that number are seriously injured. So if you see a flash of lightning, start counting. The latest guidelines say to head for shelter as soon as that number is under 30.

If you're in a car, make sure the windows and doors are closed. If you're outdoors and can't reach a building, avoid anything tall in your area. Lightning tends to take the most direct route to Earth, striking the closest (tallest) object that happens to be in its path.

Stay away from single trees, high fences, and other such structures, especially metal ones that **conduct** electricity. Avoid open areas. If you can't get out of the open, crouch close to the ground. If you are swimming in water, get out.

If you make it indoors, you still have to be careful. These days, buildings include various forms of lightning protection, but lightning is tricky. It can travel through phone lines, so only use cellphones for calls. It can come through faucets, so don't take a shower or wash anything during a storm. Don't stand close to windows.



Lightning occurs in electrical storms.

Electrical storms are amazingly beautiful, but don't forget that they are also amazingly dangerous!

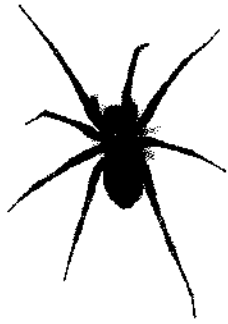


## When Lightning Strikes

### KEY VOCABULARY

- **simultaneously** (adverb) *Simultaneously* means happening at the same time.
- **comparatively** (adverb) *Comparatively* means relative to something else.
- **outages** (noun) An *outage* is a period when a service is unavailable.
- **paralyzed** (verb) To *paralyze* means to make unable to move.
- **conduct** (verb) To *conduct* is to transfer, for example, heat or electricity.

- ▶ List three facts you learned about lightning.
- ▶ Explain a way to estimate how close an electrical storm is.
- ▶ How might you use what you learned about lightning to stay safe in an electrical storm?
- ▶ How are lightning flashes and forest fires connected?
- ▶ The author states that lightning storms are “amazingly beautiful.” Explain why you agree or disagree.
- ▶ Imagine you are a meteorologist, and an electrical storm is coming your way. Use evidence from the text to give an oral or written weather report.

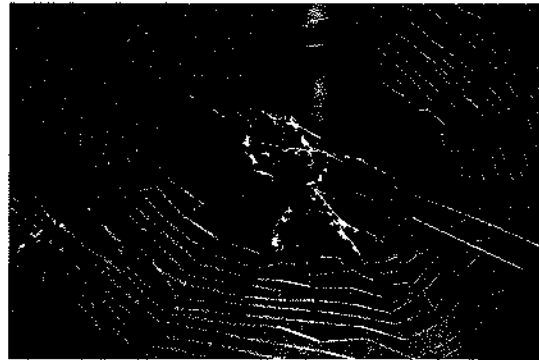


# SPLENDID SPIDERS

Fear of spiders is common. “Ugh!” people say. “Keep that creepy thing away from me.” Many people get out the broom when they see a spider in the house. And some people panic when they see just a photo of a spider. Fearful **reactions** may be common, but they are not sensible. Only a few kinds of spiders can harm people. Spiders are actually helpful because they eat insects. Spiders are fascinating creatures that deserve to be admired.

Spiders belong to a class of animals called **arachnids**. Unlike insects, spiders have eight legs, not six, and no wings or **antennae**. There are more than 35 thousand known species of spiders, with more **species** yet to be discovered. Spiders are successful predators that live all over the world.

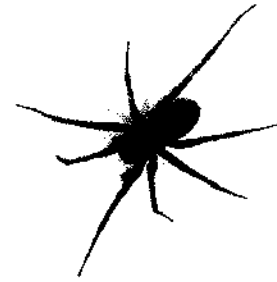
Spiders are one of the only organisms with the ability to produce silk from their bodies. About half of the world’s spiders use their silk to spin webs, which are highly effective traps. The spider rests quietly in the web or nearby, waiting for its **prey**. An insect that lands on the sticky strands of silk cannot escape. Webs come in many shapes, including funnels, sheets, and messy-looking cobwebs. The most familiar image of a web belongs to **orb-weavers**. Orb-weavers, such as the garden spider, create large, delicate, and beautifully patterned webs that **glisten** with dew.



**Orb-weavers create delicate and beautifully patterned webs.**

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Spider silk is famous for its strength and its ability to stretch without breaking. The very large webs of certain orb-weavers have even been used as fishing nets. A spider produces different kinds of silk for different purposes. Dragline silk, for example, is a lifeline for a dangling spider. It is stronger than a steel wire of the same width, and much more stretchable. **Engineers** and scientists study spider silk as they try to make a fiber that is equally strong and flexible. Such lab-made spider silk could have many uses, from ultra-strong fabrics to supports for broken bones.



Spiders do amazing things. For example, they taste their food by using the hairs on their legs. They digest their food before they swallow it, using chemicals to turn it into liquid. Young spiders leave their birthplace by “ballooning”—riding air **currents** on lightweight



**Spider silk is so strong and flexible that engineers want to make fiber just like it.**

silk threads. In addition to spiders that trap prey, there are spiders that jump, spiders that spit, and spiders that fish. Trapdoor spiders live in silken **burrows** with removable lids. When an insect passes by, the spider pops out from under the lid and grabs its prey in a flash.

People may say, “A spider—ugh!” However, once they learn a little more about spiders, it might be more fitting to say, “A spider—wow!” Spiders are marvels of the natural world.





## Splendid Spiders

### KEY VOCABULARY

- **arachnids** (noun) An *arachnid* is an animal with eight legs.
- **antennae** (noun) An *antenna* is a long, thin body part used for sensing.
- **species** (noun) A *species* is a classification of living organisms.
- **prey** (noun) *Prey* is an animal that is hunted and eaten by another.
- **orb** (noun) An *orb* is a rounded shape or a sphere.
- **glisten** (verb) To *glisten* is to shine or sparkle.
- **engineers** (noun) An *engineer* is a person who designs buildings or machines.
- **currents** (noun) A *current* is a body of air moving in one direction.
- **burrows** (noun) A *burrow* is a hole or tunnel where an animal lives.

- ▶ Name three things you learned about what spiders look like and where they live.
- ▶ Explain how spider webs can be “highly effective traps.”
- ▶ Why are scientists and engineers studying spider silk? How might their studies affect your life?
- ▶ How is an orb-weaver similar to a trapdoor spider? How is it different?
- ▶ The author gives an opinion in the last paragraph. Do you agree? Explain.
- ▶ Imagine you are a spider. Use evidence from the text to write about or discuss a typical day in your life.

## An Uninvited Guest

The dark-winged, unidentified flying object swooped from the ceiling toward the family seated in the kitchen and back up again. Bashir screamed, and his sister Aisha slid off her chair to hide under the table. “Don’t worry,” their grandmother said calmly. “It’s just a bat.”



“What do you mean it’s just a bat?” Bashir shrieked, waving his arms frantically to keep the winged creature away. “Those things carry rabies!”

Aisha peered out from under her hiding spot. “Babies? I don’t see its babies.”

Bashir shook his head and answered, “Not babies—rabies, rabies! It’s a disease you get from bats. They bite you, and then you die.”

Aisha started to cry, and their grandmother said, “Let’s not overreact. First, very few bats carry rabies. Second, there’s a medical treatment for rabies. And third, this poor bat is probably just as afraid of you as you’re afraid of it.”

“Who’s afraid?” asked Bashir in the bravest voice he could **muster**. Just then, the bat spread its wings and glided toward Bashir’s head. He screamed again and ducked behind Aisha under the table.

"I heard that bats like to get tangled in people's hair!" Aisha **shuddered**.

"That's only a myth," **reassured** their grandmother as she quickly gathered a blanket that had been draped over a chair. "And this poor animal will soon exhaust itself." Sure enough, after a few more swoops around the room, the bat finally settled on a high shelf. A quick toss of the blanket succeeded in trapping the bat in its soft folds.

"You caught it!" exclaimed Bashir. Every time he visited his grandmother, he was always impressed that she knew exactly how to handle any situation.

Bashir crept closer to the bundle in his grandmother's arms and saw that the bat's eyes were fixed on him with a combination of what he thought might be curiosity and fear. "Now what should we do with it?" he asked in a hushed tone.

"We need to set it free, of course," their grandmother asserted, walking to the door and opening it. "I'm not sure if this bat wants to make a home in our attic or if it's lost, but it will be much more comfortable outside." She shook the blanket gently to release the bat, and they watched it soar into the distance until it disappeared.

Bashir breathed a sigh of relief, and his grandmother smiled.

"I'm always happy to see bats flying around outside because they **devour** mosquitoes by the thousands," she remarked. "Without bats, the world would be much bugger than it is. We need them, even though we don't like to share our indoor spaces with them."

One evening not long after the weekend visit with his grandmother, Bashir noticed familiar black figures circling **swiftly** against the dimming sky outside his apartment window.

He recognized them immediately and murmured, "Hello, my mosquito-eating friends," pleased that this time he did not feel afraid at all.





## An Uninvited Guest

### KEY VOCABULARY

- **muster** (verb) To *muster* means to work hard to find.
- **shuddered** (verb) To *shudder* is to shake from fear.
- **reassured** (verb) To *reassure* means to make someone feel less worried.
- **devour** (verb) To *devour* is to eat quickly and hungrily.
- **swiftly** (adverb) *Swiftly* means quickly.

- ▶ How does Bashir's grandmother finally catch the bat?
- ▶ Explain why Bashir describes his grandmother as someone who "knew exactly how to handle any situation."
- ▶ Illustrate and describe two scenes from the story: the kitchen at the beginning of the story and Bashir's apartment at the end of the story.
- ▶ What might Bashir do differently if he finds himself in a room with a bat again?
- ▶ What was your opinion of bats before reading the story? What is your opinion of bats now?
- ▶ Rewrite this story (or write your own) from the point of view of a bat.

# In Grandfather's Day

Sharr and her brother Kaze were visiting Grandfather to **celebrate** his 75th birthday. Grandfather was born way back in the year 2000, and the two grandchildren always enjoyed hearing about what life was like when he was growing up at a time so different from their own.

"Grandfather, tell us what you did before there were Mindcaps," Kaze begged.

"Well, sometimes we typed on a keyboard," Grandfather replied, wiggling his fingers over an imaginary keyboard. "Or we tapped a touchscreen," he added, **demonstrating** with two fingers.

"But it must have taken so long to get anything done that way!" observed Sharr.

"We didn't have thought commands back then," said Grandfather as he placed a Mindcap on his head and glanced at the Wallscreen. The wall lit up with a photograph taken of Grandfather as a boy.

"I'm standing in front of our family's car," Grandfather explained.

"Was it fun to drive such a big car?" asked Kaze.



Grandfather **chuckled**. "I was only ten years old, so I couldn't drive a car. Drivers needed special training because driving was dangerous. Today, accidents don't happen. A child can sit in a Plugger, give a thought command, and off it scoots. Nobody dreamed of such a thing back in the early 2000s."

Grandfather blinked at the Wallscreen, and a new image appeared, this one showing seven-year-old Grandfather and his mother in the kitchen of their house.

"What is Great-Grandmother doing?" asked Sharr.

"She is cooking a pot of stew on the stove," said Grandfather. "It took hours."

Sharr said, "I'm glad we have Menu-Mems because who wants to wait hours to eat? Just give a thought command to the slot, and out comes the meal."

Grandfather was smiling as he stared at the picture. "I remember it like it was yesterday," he said dreamily. "I helped peel potatoes while Mom chopped up carrots. The kitchen filled with spicy warmth as the stew **simmered** in the pot." Grandfather breathed in deeply, as if sniffing a wonderful **aroma**.

Kaze and Sharr studied the picture. Then Kaze said, "I wonder what a home-cooked meal tastes like." Sharr nodded in agreement.

"It is **unforgettable**," said Grandfather with a sigh.





## In Grandfather's Day

### KEY VOCABULARY

- **celebrate** (verb) To *celebrate* is to do something fun or special.
- **demonstrating** (verb) To *demonstrate* is to show clearly.
- **chuckled** (verb) To *chuckle* is to laugh quietly.
- **simmered** (verb) To *simmer* is to boil gently.
- **aroma** (noun) An *aroma* is the smell of something.
- **unforgettable** (adjective) *Unforgettable* means very easy to remember.

- ▶ Name three examples of technology available to Sharr and Kaze that were not invented when Grandfather was a boy.
- ▶ Explain how Mindcaps and Pluggers changed people's lives.
- ▶ How might you use thought commands in your life?
- ▶ Compare and contrast Grandfather's childhood to that of Sharr and Kaze.
- ▶ Do you agree with Sharr that Menu-Mems are a good thing? Why or why not?
- ▶ How do you think life will be different when you are 75 years old?

# The Legend of the African Crowned Crane

Once, long ago, an African king became **separated** from his **companions** while out hunting in the dry grasslands. The king was lost, and he did not know how to find the **oasis** where the royal court was set up. It was a hot day, and the king knew that he would die of thirst if he did not find water soon.

Zebras were **grazing** nearby. "Please help me," the king said to the zebra chief. "I must find my court. Can you lead me to it?"



The zebra chief turned away from the king. "We cannot help you, for you have hunted us."



The king then asked the elephant queen for help, but she, too, refused. "We do not help those who want to kill us," she said.

The king asked the antelopes, but they also said no because they were favorite game animals of hunters such as the king.



A **flock** of long-legged, long-necked birds called cranes landed near the king. Weakly, the king begged the cranes for help. They did not turn away. Instead, the cranes brought water to the king and then led him to his court.



The grateful king ordered his **goldsmith** to make a crown of gold for each crane. The next day, the cranes flew off wearing their crowns, but the day after that, they returned with bare heads. The cranes said that the other animals had become **envious** and angry when they saw the golden crowns. The animals had stolen the crowns and destroyed them.

The king had new crowns made, not of gold, but of golden feathers that could not be removed. Each crane flew off wearing its gold-feathered crown.

And that is how African crowned cranes received the beautiful, **shimmering** crowns of gold that they still wear today.





## The Legend of the African Crowned Crane

### KEY VOCABULARY

- **separated** (adjective) *Separated* means moved apart.
- **companions** (noun) A *companion* is a friend.
- **oasis** (noun) An *oasis* is a spot in the desert where water is found.
- **grazing** (verb) To *graze* is to feed on grass.
- **flock** (noun) A *flock* is a group of animals.
- **goldsmith** (noun) A *goldsmith* is a person who makes gold items.
- **envious** (adjective) *Envious* means jealous.
- **shimmering** (adjective) *Shimmering* means shining brightly.

- ▶ List the animals that refused to help the king find his way back to the royal court.
- ▶ Explain why the zebra chief, the elephant queen, and the antelopes refused to help the king, but the cranes did not refuse.
- ▶ Choose one of the animals from the legend. If you were that animal, what would you do if the king asked for help?
- ▶ What might the king do differently if he were lost again and wanted the zebras, elephants, or antelopes to help him?
- ▶ In your opinion, did the zebra chief, the elephant queen, and the antelopes do the right thing? Explain your answer.
- ▶ Write or discuss a new ending to the story to explain another way the African crowned crane might have received its gold-feathered crown.

# Writing

Name: \_\_\_\_\_

**READ** the information in the box below.

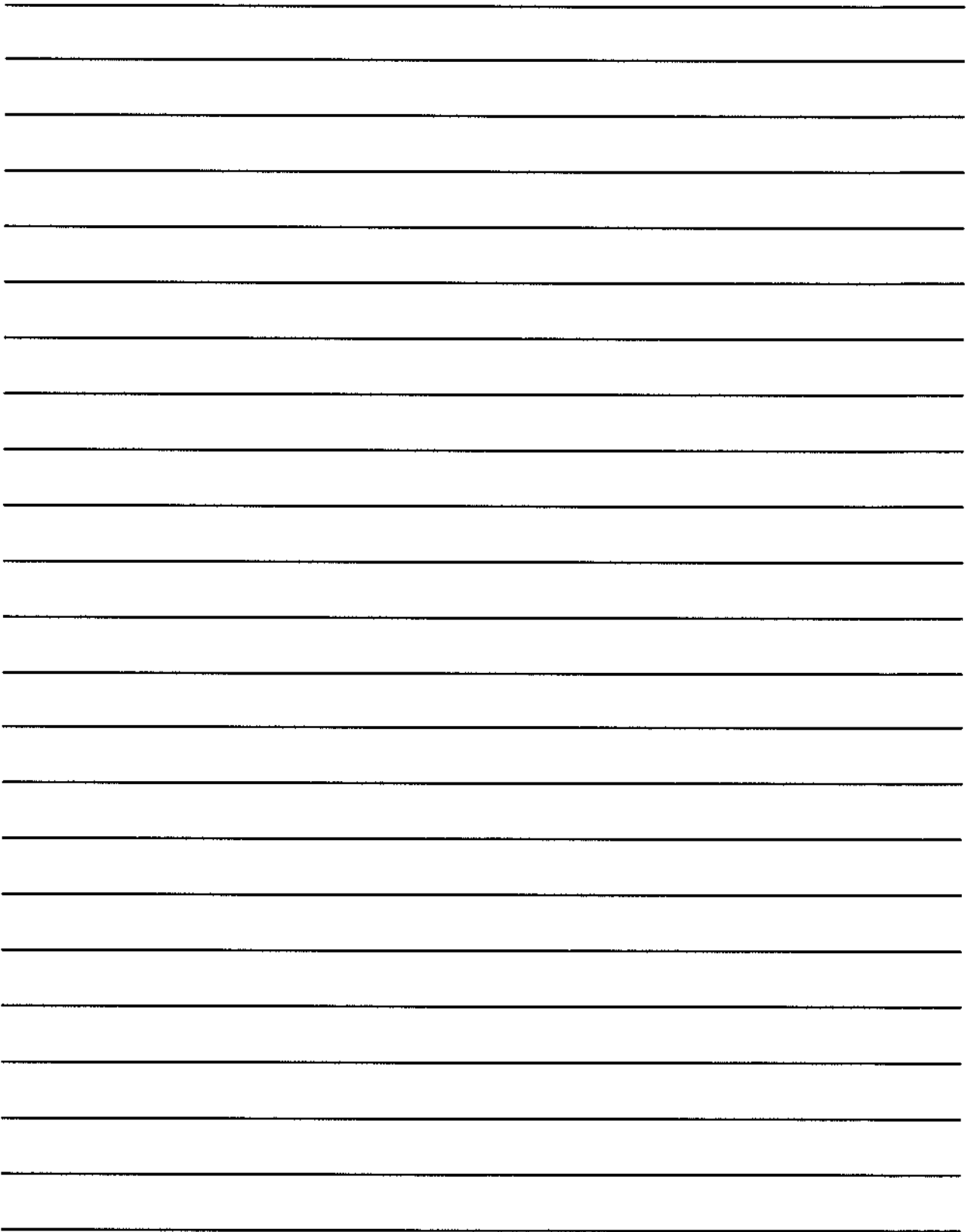
Technology is a set of tools invented to make life easier. Telephones, cars, and even refrigerators are all examples of technologies that changed the world.

**THINK** about the technology that makes your life easier. What one type of technology would be most difficult to live without?

**WRITE** about one type of technology that would be difficult to live without and explain why it is important.

**Be sure to –**

- organize your ideas before you start writing
- choose your words carefully
- clearly state your central idea
- write in complete sentences
- use details to support your central idea
- use correct spelling, capitalization, punctuation, and grammar





Name: \_\_\_\_\_

**READ** the statement in the box below.

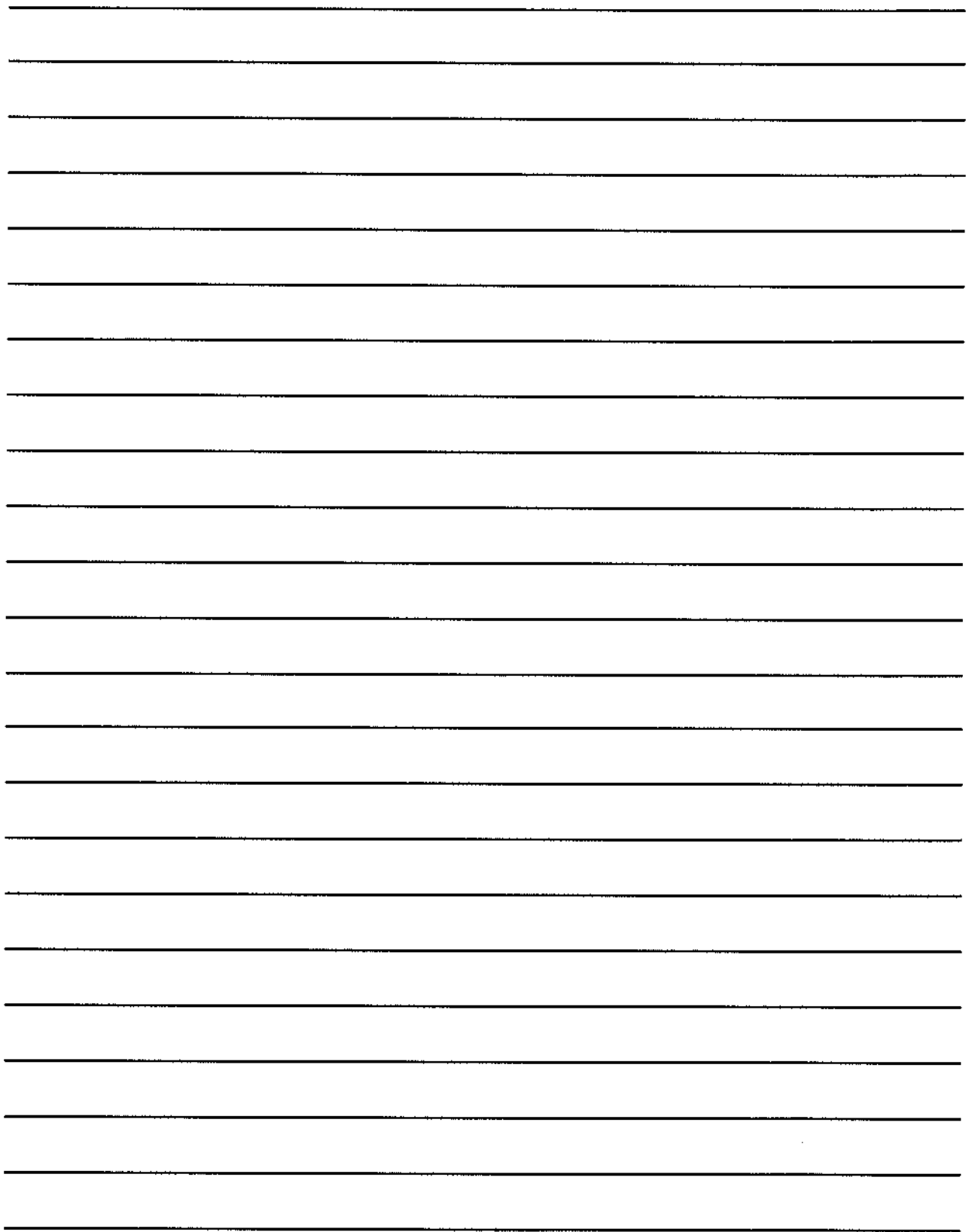
In many schools, students are given homework to complete after school. Some schools, however, have a “no-homework” policy.

**THINK** about your school’s policy about homework. Do you think homework helps students learn?

**WRITE** about whether your school should give homework or not and support your opinion with reasons and evidence.

**Be sure to –**

- |  |   |
|--|---|
| <input type="checkbox"/> organize your ideas before you start writing      | <input type="checkbox"/> choose your words carefully                                    |
| <input type="checkbox"/> clearly state your position                       | <input type="checkbox"/> write in complete sentences                                    |
| <input type="checkbox"/> use reasons and evidence to support your position | <input type="checkbox"/> use correct spelling, capitalization, punctuation, and grammar |







Name: \_\_\_\_\_

**READ** the information in the box below.

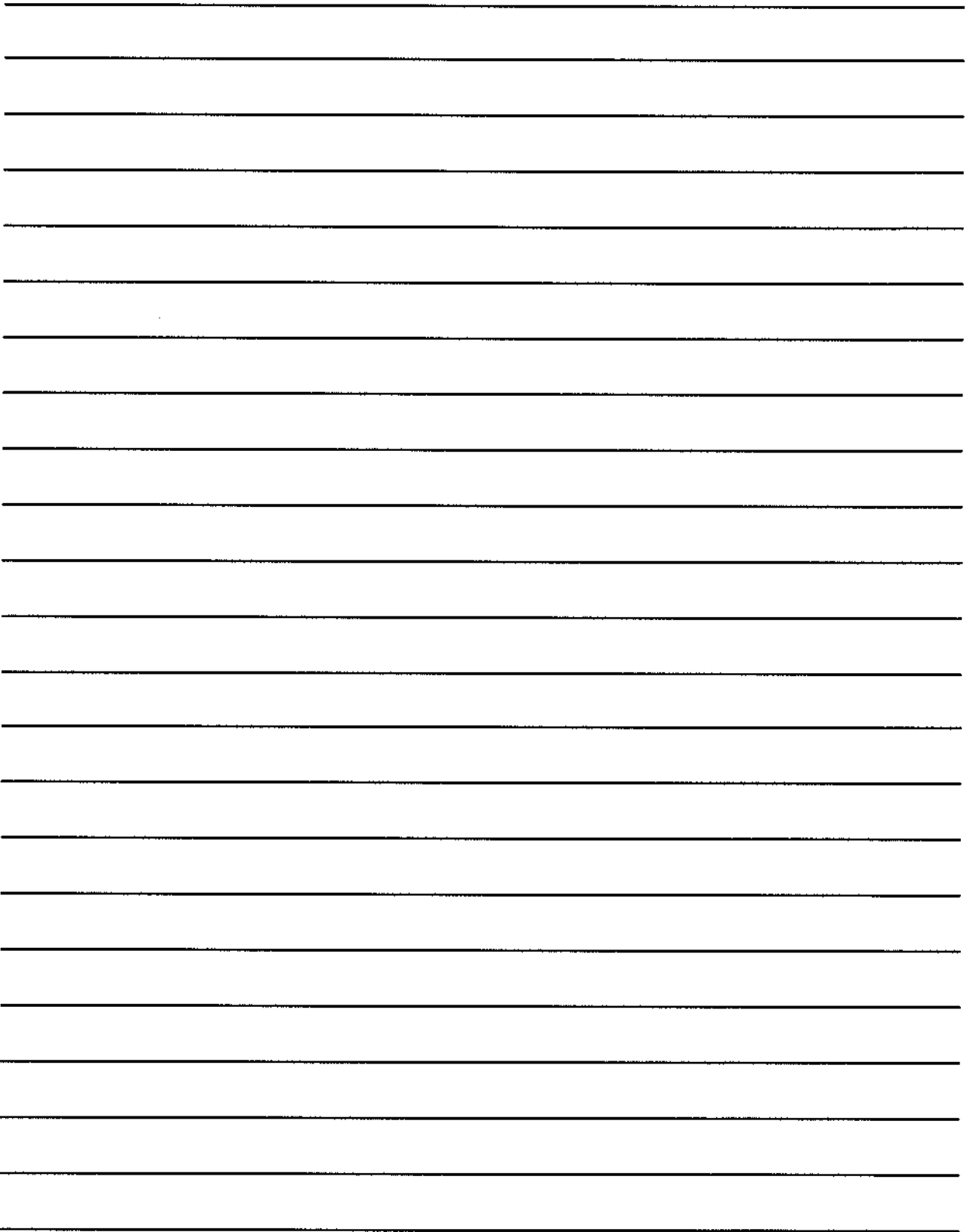
Being persistent means not giving up no matter how difficult it is to achieve a goal.

**THINK** about what it takes to achieve a goal.

**WRITE** about a time you overcame a challenge or developed a new skill.

**Be sure to –**

- organize your ideas before you start writing
- write about a personal experience
- develop your ideas in detail
- choose your words carefully
- write in complete sentences
- use correct spelling, capitalization, punctuation, and grammar





Name: \_\_\_\_\_

**READ** the information in the box below.

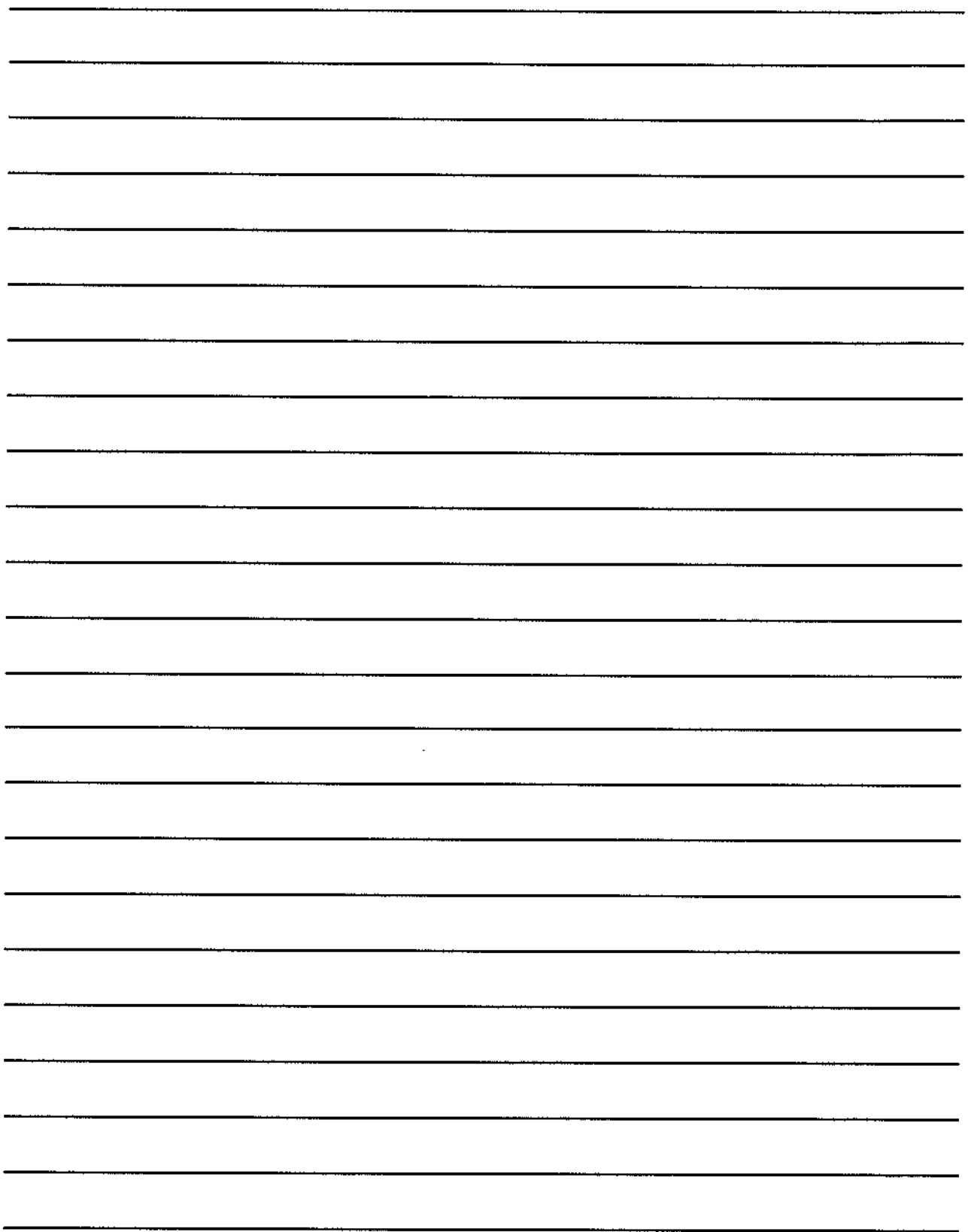
A theme is a central message or lesson in a story, play, or poem. A common theme is *Even a small act of kindness can make a difference*.

**THINK** about the theme *Even a small act of kindness can make a difference*. How might you write a story that shows this theme?

**WRITE** a story that shows the theme *Even a small act of kindness can make a difference*.

**Be sure to –**

- organize your ideas before you start writing
- write a story with a beginning, a middle, and an end
- develop your ideas in detail
- choose your words carefully
- write in complete sentences
- use correct spelling, capitalization, punctuation, and grammar





Name: \_\_\_\_\_

**READ** the statement in the box below.

Some schools allow students to have a class pet, such as gerbils, fish, or birds.  
Other schools do not allow class pets.

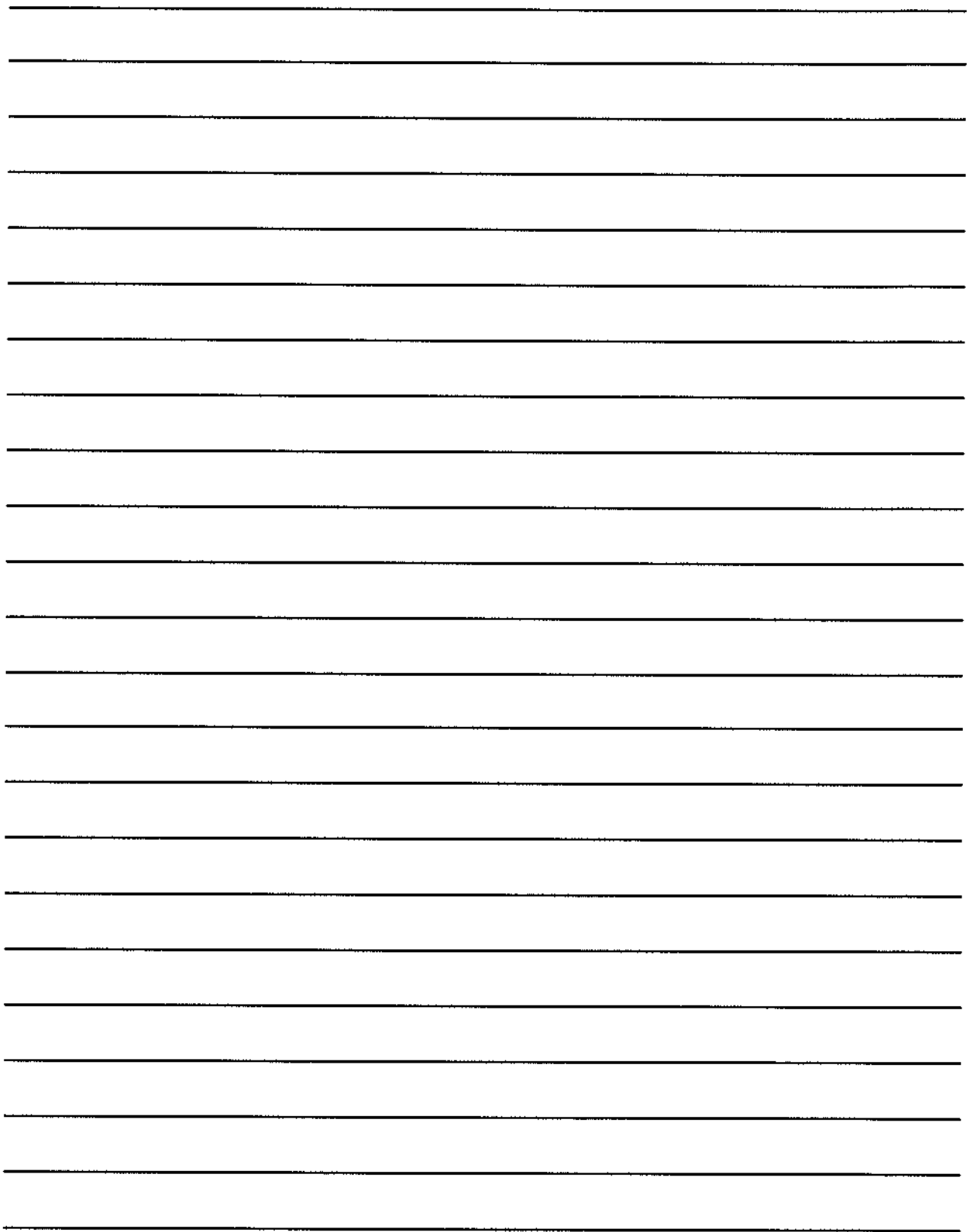
**THINK** about the advantages and disadvantages of having a class pet. Do you think your class should have a class pet?

**WRITE** about whether your class should have a class pet and support your opinion with reasons and evidence.

**Be sure to –**

- |  |   |
|--|---|
| <input type="checkbox"/> organize your ideas before you start writing      | <input type="checkbox"/> choose your words carefully                                    |
| <input type="checkbox"/> clearly state your position                       | <input type="checkbox"/> write in complete sentences                                    |
| <input type="checkbox"/> use reasons and evidence to support your position | <input type="checkbox"/> use correct spelling, capitalization, punctuation, and grammar |







# Math

**A**

Number Correct: \_\_\_\_\_

## Multiply a Fraction and a Whole Number

1.	$\frac{1}{5} \times 2 =$	
2.	$\frac{1}{5} \times 3 =$	
3.	$\frac{1}{5} \times 4 =$	
4.	$4 \times \frac{1}{5} =$	
5.	$\frac{1}{8} \times 3 =$	
6.	$\frac{1}{8} \times 5 =$	
7.	$\frac{1}{8} \times 7 =$	
8.	$7 \times \frac{1}{8} =$	
9.	$3 \times \frac{1}{10} =$	
10.	$7 \times \frac{1}{10} =$	
11.	$\frac{1}{10} \times 7 =$	
12.	$4 \div 2 =$	
13.	$4 \times \frac{1}{2} =$	
14.	$6 \div 3 =$	
15.	$\frac{1}{3} \times 6 =$	
16.	$10 \div 5 =$	
17.	$10 \times \frac{1}{5} =$	
18.	$\frac{1}{3} \times 9 =$	
19.	$\frac{2}{3} \times 9 =$	
20.	$\frac{1}{4} \times 8 =$	
21.	$\frac{3}{4} \times 8 =$	
22.	$\frac{1}{6} \times 12 =$	

23.	$\frac{5}{6} \times 12 =$	
24.	$\frac{1}{3} \times 15 =$	
25.	$\frac{2}{3} \times 15 =$	
26.	$15 \times \frac{2}{3} =$	
27.	$\frac{1}{5} \times 15 =$	
28.	$\frac{2}{5} \times 15 =$	
29.	$\frac{4}{5} \times 15 =$	
30.	$\frac{3}{5} \times 15 =$	
31.	$15 \times \frac{3}{5} =$	
32.	$18 \times \frac{1}{6} =$	
33.	$18 \times \frac{5}{6} =$	
34.	$\frac{5}{6} \times 18 =$	
35.	$24 \times \frac{1}{4} =$	
36.	$\frac{3}{4} \times 24 =$	
37.	$32 \times \frac{1}{8} =$	
38.	$32 \times \frac{3}{8} =$	
39.	$\frac{5}{8} \times 32 =$	
40.	$32 \times \frac{7}{8} =$	
41.	$\frac{5}{9} \times 54 =$	
42.	$63 \times \frac{7}{9} =$	
43.	$56 \times \frac{3}{7} =$	
44.	$\frac{6}{7} \times 49 =$	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

## Multiply a Fraction and a Whole Number

1.	$\frac{1}{7} \times 2 =$	
2.	$\frac{1}{7} \times 3 =$	
3.	$\frac{1}{7} \times 4 =$	
4.	$4 \times \frac{1}{7} =$	
5.	$\frac{1}{10} \times 3 =$	
6.	$\frac{1}{10} \times 7 =$	
7.	$\frac{1}{10} \times 9 =$	
8.	$9 \times \frac{1}{10} =$	
9.	$3 \times \frac{1}{8} =$	
10.	$5 \times \frac{1}{8} =$	
11.	$\frac{1}{8} \times 5 =$	
12.	$10 \div 5 =$	
13.	$10 \times \frac{1}{5} =$	
14.	$9 \div 3 =$	
15.	$\frac{1}{3} \times 9 =$	
16.	$10 \div 2 =$	
17.	$10 \times \frac{1}{2} =$	
18.	$\frac{1}{3} \times 6 =$	
19.	$\frac{2}{3} \times 6 =$	
20.	$\frac{1}{6} \times 12 =$	
21.	$\frac{5}{6} \times 12 =$	
22.	$\frac{1}{4} \times 8 =$	

23.	$\frac{3}{4} \times 8 =$	
24.	$\frac{1}{5} \times 15 =$	
25.	$\frac{2}{5} \times 15 =$	
26.	$\frac{4}{5} \times 15 =$	
27.	$\frac{3}{5} \times 15 =$	
28.	$15 \times \frac{3}{5} =$	
29.	$\frac{1}{3} \times 15 =$	
30.	$\frac{2}{3} \times 15 =$	
31.	$15 \times \frac{2}{3} =$	
32.	$24 \times \frac{1}{6} =$	
33.	$24 \times \frac{5}{6} =$	
34.	$\frac{5}{6} \times 24 =$	
35.	$20 \times \frac{1}{4} =$	
36.	$\frac{3}{4} \times 20 =$	
37.	$24 \times \frac{1}{8} =$	
38.	$24 \times \frac{3}{8} =$	
39.	$\frac{5}{8} \times 24 =$	
40.	$24 \times \frac{7}{8} =$	
41.	$\frac{5}{9} \times 63 =$	
42.	$54 \times \frac{7}{9} =$	
43.	$49 \times \frac{3}{7} =$	
44.	$\frac{6}{7} \times 56 =$	

## A

Number Correct: \_\_\_\_\_

## Multiply Fractions

1.	$\frac{1}{2} \times \frac{1}{2} =$	
2.	$\frac{1}{2} \times \frac{1}{3} =$	
3.	$\frac{1}{2} \times \frac{1}{4} =$	
4.	$\frac{1}{2} \times \frac{1}{7} =$	
5.	$\frac{1}{7} \times \frac{1}{2} =$	
6.	$\frac{1}{3} \times \frac{1}{2} =$	
7.	$\frac{1}{3} \times \frac{1}{3} =$	
8.	$\frac{1}{3} \times \frac{1}{6} =$	
9.	$\frac{1}{3} \times \frac{1}{5} =$	
10.	$\frac{1}{5} \times \frac{1}{3} =$	
11.	$\frac{1}{5} \times \frac{2}{3} =$	
12.	$\frac{2}{5} \times \frac{2}{3} =$	
13.	$\frac{1}{4} \times \frac{1}{3} =$	
14.	$\frac{1}{4} \times \frac{2}{3} =$	
15.	$\frac{3}{4} \times \frac{2}{3} =$	
16.	$\frac{1}{6} \times \frac{1}{3} =$	
17.	$\frac{5}{6} \times \frac{1}{3} =$	
18.	$\frac{5}{6} \times \frac{2}{3} =$	
19.	$\frac{5}{4} \times \frac{2}{3} =$	
20.	$\frac{1}{5} \times \frac{1}{5} =$	
21.	$\frac{2}{5} \times \frac{2}{5} =$	
22.	$\frac{2}{5} \times \frac{3}{5} =$	

23.	$\frac{2}{5} \times \frac{5}{3} =$	
24.	$\frac{3}{5} \times \frac{5}{2} =$	
25.	$\frac{1}{3} \times \frac{1}{3} =$	
26.	$\frac{1}{3} \times \frac{2}{3} =$	
27.	$\frac{2}{3} \times \frac{2}{3} =$	
28.	$\frac{2}{3} \times \frac{3}{2} =$	
29.	$\frac{2}{3} \times \frac{4}{3} =$	
30.	$\frac{2}{3} \times \frac{5}{3} =$	
31.	$\frac{3}{2} \times \frac{3}{5} =$	
32.	$\frac{3}{4} \times \frac{1}{5} =$	
33.	$\frac{3}{4} \times \frac{4}{5} =$	
34.	$\frac{3}{4} \times \frac{5}{5} =$	
35.	$\frac{3}{4} \times \frac{6}{5} =$	
36.	$\frac{1}{4} \times \frac{6}{5} =$	
37.	$\frac{1}{7} \times \frac{1}{7} =$	
38.	$\frac{1}{8} \times \frac{3}{5} =$	
39.	$\frac{5}{6} \times \frac{1}{4} =$	
40.	$\frac{3}{4} \times \frac{3}{4} =$	
41.	$\frac{2}{3} \times \frac{6}{6} =$	
42.	$\frac{3}{4} \times \frac{6}{2} =$	
43.	$\frac{7}{8} \times \frac{7}{9} =$	
44.	$\frac{7}{12} \times \frac{9}{8} =$	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

## Multiply Fractions

1.	$\frac{1}{2} \times \frac{1}{3} =$	
2.	$\frac{1}{2} \times \frac{1}{4} =$	
3.	$\frac{1}{2} \times \frac{1}{5} =$	
4.	$\frac{1}{2} \times \frac{1}{9} =$	
5.	$\frac{1}{9} \times \frac{1}{2} =$	
6.	$\frac{1}{5} \times \frac{1}{2} =$	
7.	$\frac{1}{5} \times \frac{1}{3} =$	
8.	$\frac{1}{5} \times \frac{1}{7} =$	
9.	$\frac{1}{5} \times \frac{1}{3} =$	
10.	$\frac{1}{3} \times \frac{1}{5} =$	
11.	$\frac{1}{3} \times \frac{2}{5} =$	
12.	$\frac{2}{3} \times \frac{2}{5} =$	
13.	$\frac{1}{3} \times \frac{1}{4} =$	
14.	$\frac{1}{3} \times \frac{3}{4} =$	
15.	$\frac{2}{3} \times \frac{3}{4} =$	
16.	$\frac{1}{3} \times \frac{1}{6} =$	
17.	$\frac{2}{3} \times \frac{1}{6} =$	
18.	$\frac{2}{3} \times \frac{5}{6} =$	
19.	$\frac{3}{2} \times \frac{3}{4} =$	
20.	$\frac{1}{5} \times \frac{1}{5} =$	
21.	$\frac{3}{5} \times \frac{3}{5} =$	
22.	$\frac{3}{5} \times \frac{4}{5} =$	

23.	$\frac{3}{5} \times \frac{5}{4} =$	
24.	$\frac{4}{5} \times \frac{5}{3} =$	
25.	$\frac{1}{4} \times \frac{1}{4} =$	
26.	$\frac{1}{4} \times \frac{3}{4} =$	
27.	$\frac{3}{4} \times \frac{3}{4} =$	
28.	$\frac{3}{4} \times \frac{4}{3} =$	
29.	$\frac{3}{4} \times \frac{5}{4} =$	
30.	$\frac{3}{4} \times \frac{6}{4} =$	
31.	$\frac{4}{3} \times \frac{4}{6} =$	
32.	$\frac{2}{3} \times \frac{1}{5} =$	
33.	$\frac{2}{3} \times \frac{4}{5} =$	
34.	$\frac{2}{3} \times \frac{5}{5} =$	
35.	$\frac{2}{3} \times \frac{6}{5} =$	
36.	$\frac{1}{3} \times \frac{6}{5} =$	
37.	$\frac{1}{9} \times \frac{1}{9} =$	
38.	$\frac{1}{5} \times \frac{3}{8} =$	
39.	$\frac{3}{4} \times \frac{1}{6} =$	
40.	$\frac{2}{3} \times \frac{2}{3} =$	
41.	$\frac{3}{4} \times \frac{8}{8} =$	
42.	$\frac{2}{3} \times \frac{6}{3} =$	
43.	$\frac{6}{7} \times \frac{8}{9} =$	
44.	$\frac{7}{12} \times \frac{8}{7} =$	

**A**

Number Correct: \_\_\_\_\_

Divide Whole Numbers by Fractions and Fractions by Whole Numbers

1.	$\frac{1}{2} \div 2 =$	
2.	$\frac{1}{2} \div 3 =$	
3.	$\frac{1}{2} \div 4 =$	
4.	$\frac{1}{2} \div 7 =$	
5.	$7 \div \frac{1}{2} =$	
6.	$6 \div \frac{1}{2} =$	
7.	$5 \div \frac{1}{2} =$	
8.	$3 \div \frac{1}{2} =$	
9.	$2 \div \frac{1}{5} =$	
10.	$3 \div \frac{1}{5} =$	
11.	$4 \div \frac{1}{5} =$	
12.	$7 \div \frac{1}{5} =$	
13.	$\frac{1}{5} \div 7 =$	
14.	$\frac{1}{3} \div 2 =$	
15.	$2 \div \frac{1}{3} =$	
16.	$\frac{1}{4} \div 2 =$	
17.	$2 \div \frac{1}{4} =$	
18.	$\frac{1}{5} \div 2 =$	
19.	$2 \div \frac{1}{5} =$	
20.	$3 \div \frac{1}{4} =$	
21.	$\frac{1}{4} \div 3 =$	
22.	$\frac{1}{4} \div 4 =$	

23.	$4 \div \frac{1}{4} =$	
24.	$\frac{1}{3} \div 3 =$	
25.	$\frac{2}{3} \div 3 =$	
26.	$\frac{1}{4} \div 2 =$	
27.	$\frac{3}{4} \div 2 =$	
28.	$\frac{1}{5} \div 2 =$	
29.	$\frac{3}{5} \div 2 =$	
30.	$\frac{1}{6} \div 2 =$	
31.	$\frac{5}{6} \div 2 =$	
32.	$\frac{5}{6} \div 3 =$	
33.	$\frac{1}{6} \div 3 =$	
34.	$3 \div \frac{1}{6} =$	
35.	$6 \div \frac{1}{6} =$	
36.	$7 \div \frac{1}{7} =$	
37.	$8 \div \frac{1}{8} =$	
38.	$9 \div \frac{1}{9} =$	
39.	$\frac{1}{8} \div 7 =$	
40.	$9 \div \frac{1}{8} =$	
41.	$\frac{1}{8} \div 7 =$	
42.	$7 \div \frac{1}{6} =$	
43.	$9 \div \frac{1}{7} =$	
44.	$\frac{1}{8} \div 9 =$	



**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Divide Whole Numbers by Fractions and Fractions by Whole Numbers

1.	$\frac{1}{2} \div 2 =$	
2.	$\frac{1}{5} \div 3 =$	
3.	$\frac{1}{5} \div 4 =$	
4.	$\frac{1}{5} \div 7 =$	
5.	$7 \div \frac{1}{5} =$	
6.	$6 \div \frac{1}{5} =$	
7.	$5 \div \frac{1}{5} =$	
8.	$3 \div \frac{1}{5} =$	
9.	$2 \div \frac{1}{2} =$	
10.	$3 \div \frac{1}{2} =$	
11.	$4 \div \frac{1}{2} =$	
12.	$7 \div \frac{1}{2} =$	
13.	$\frac{1}{2} \div 7 =$	
14.	$\frac{1}{4} \div 2 =$	
15.	$2 \div \frac{1}{4} =$	
16.	$\frac{1}{3} \div 2 =$	
17.	$2 \div \frac{1}{3} =$	
18.	$\frac{1}{2} \div 2 =$	
19.	$2 \div \frac{1}{2} =$	
20.	$4 \div \frac{1}{3} =$	
21.	$\frac{1}{3} \div 4 =$	
22.	$\frac{1}{3} \div 3 =$	

23.	$3 \div \frac{1}{3} =$	
24.	$\frac{1}{4} \div 4 =$	
25.	$\frac{3}{4} \div 4 =$	
26.	$\frac{1}{3} \div 3 =$	
27.	$\frac{2}{3} \div 3 =$	
28.	$\frac{1}{6} \div 2 =$	
29.	$\frac{5}{6} \div 2 =$	
30.	$\frac{1}{5} \div 5 =$	
31.	$\frac{3}{5} \div 5 =$	
32.	$\frac{3}{5} \div 4 =$	
33.	$\frac{1}{5} \div 6 =$	
34.	$6 \div \frac{1}{5} =$	
35.	$6 \div \frac{1}{4} =$	
36.	$7 \div \frac{1}{6} =$	
37.	$8 \div \frac{1}{7} =$	
38.	$9 \div \frac{1}{8} =$	
39.	$\frac{1}{8} \div 8 =$	
40.	$9 \div \frac{1}{9} =$	
41.	$\frac{1}{9} \div 8 =$	
42.	$7 \div \frac{1}{7} =$	
43.	$9 \div \frac{1}{6} =$	
44.	$\frac{1}{8} \div 6 =$	

**A**

Number Correct: \_\_\_\_\_

Multiply Decimals by 10, 100, and 1,000

1.	$62.3 \times 10 =$	
2.	$62.3 \times 100 =$	
3.	$62.3 \times 1,000 =$	
4.	$73.6 \times 10 =$	
5.	$73.6 \times 100 =$	
6.	$73.6 \times 1,000 =$	
7.	$0.6 \times 10 =$	
8.	$0.06 \times 10 =$	
9.	$0.006 \times 10 =$	
10.	$0.3 \times 10 =$	
11.	$0.3 \times 100 =$	
12.	$0.3 \times 1,000 =$	
13.	$0.02 \times 10 =$	
14.	$0.02 \times 100 =$	
15.	$0.02 \times 1,000 =$	
16.	$0.008 \times 10 =$	
17.	$0.008 \times 100 =$	
18.	$0.008 \times 1,000 =$	
19.	$0.32 \times 10 =$	
20.	$0.67 \times 10 =$	
21.	$0.91 \times 100 =$	
22.	$0.74 \times 100 =$	

23.	$4.1 \times 1,000 =$	
24.	$7.6 \times 1,000 =$	
25.	$0.01 \times 1,000 =$	
26.	$0.07 \times 1,000 =$	
27.	$0.072 \times 100 =$	
28.	$0.802 \times 10 =$	
29.	$0.019 \times 1,000 =$	
30.	$7.412 \times 1,000 =$	
31.	$6.8 \times 100 =$	
32.	$4.901 \times 10 =$	
33.	$16.07 \times 100 =$	
34.	$9.19 \times 10 =$	
35.	$18.2 \times 100 =$	
36.	$14.7 \times 1,000 =$	
37.	$2.021 \times 100 =$	
38.	$172.1 \times 10 =$	
39.	$3.2 \times 20 =$	
40.	$4.1 \times 20 =$	
41.	$3.2 \times 30 =$	
42.	$1.3 \times 30 =$	
43.	$3.12 \times 40 =$	
44.	$14.12 \times 40 =$	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Multiply Decimals by 10, 100, and 1,000

1.	$46.1 \times 10 =$	
2.	$46.1 \times 100 =$	
3.	$46.1 \times 1,000 =$	
4.	$89.2 \times 10 =$	
5.	$89.2 \times 100 =$	
6.	$89.2 \times 1,000 =$	
7.	$0.3 \times 10 =$	
8.	$0.03 \times 10 =$	
9.	$0.003 \times 10 =$	
10.	$0.9 \times 10 =$	
11.	$0.9 \times 100 =$	
12.	$0.9 \times 1,000 =$	
13.	$0.04 \times 10 =$	
14.	$0.04 \times 100 =$	
15.	$0.04 \times 1,000 =$	
16.	$0.007 \times 10 =$	
17.	$0.007 \times 100 =$	
18.	$0.007 \times 1,000 =$	
19.	$0.45 \times 10 =$	
20.	$0.78 \times 10 =$	
21.	$0.28 \times 100 =$	
22.	$0.19 \times 100 =$	

23.	$5.2 \times 1,000 =$	
24.	$8.7 \times 1,000 =$	
25.	$0.01 \times 1,000 =$	
26.	$0.08 \times 1,000 =$	
27.	$0.083 \times 10 =$	
28.	$0.903 \times 10 =$	
29.	$0.017 \times 1,000 =$	
30.	$8.523 \times 1,000 =$	
31.	$7.9 \times 100 =$	
32.	$5.802 \times 10 =$	
33.	$27.08 \times 100 =$	
34.	$8.18 \times 10 =$	
35.	$29.3 \times 100 =$	
36.	$25.8 \times 1,000 =$	
37.	$3.032 \times 100 =$	
38.	$283.1 \times 10 =$	
39.	$2.1 \times 20 =$	
40.	$3.3 \times 20 =$	
41.	$3.1 \times 30 =$	
42.	$1.2 \times 30 =$	
43.	$2.11 \times 40 =$	
44.	$13.11 \times 40 =$	

**A**

Number Correct: \_\_\_\_\_

Multiply by 10, 100, and 1,000

1.	$9 \times 10 =$	
2.	$9 \times 100 =$	
3.	$9 \times 1,000 =$	
4.	$8 \times 10 =$	
5.	$80 \times 10 =$	
6.	$80 \times 100 =$	
7.	$80 \times 1,000 =$	
8.	$7 \times 10 =$	
9.	$70 \times 10 =$	
10.	$700 \times 10 =$	
11.	$700 \times 100 =$	
12.	$700 \times 1,000 =$	
13.	$2 \times 10 =$	
14.	$30 \times 10 =$	
15.	$32 \times 10 =$	
16.	$4 \times 10 =$	
17.	$50 \times 10 =$	
18.	$54 \times 10 =$	
19.	$37 \times 10 =$	
20.	$84 \times 10 =$	
21.	$84 \times 100 =$	
22.	$84 \times 1,000 =$	

23.	$73 \times 1,000 =$	
24.	$60 \times 10 =$	
25.	$600 \times 10 =$	
26.	$600 \times 100 =$	
27.	$65 \times 100 =$	
28.	$652 \times 100 =$	
29.	$342 \times 100 =$	
30.	$800 \times 100 =$	
31.	$800 \times 1,000 =$	
32.	$860 \times 1,000 =$	
33.	$867 \times 1,000 =$	
34.	$492 \times 1,000 =$	
35.	$34 \times 10 =$	
36.	$629 \times 10 =$	
37.	$94 \times 100 =$	
38.	$238 \times 100 =$	
39.	$47 \times 1,000 =$	
40.	$294 \times 1,000 =$	
41.	$174 \times 100 =$	
42.	$285 \times 1,000 =$	
43.	$951 \times 100 =$	
44.	$129 \times 1,000 =$	

**B**

Number Correct: \_\_\_\_\_

Improvement: \_\_\_\_\_

Multiply by 10, 100, and 1,000

1.	$8 \times 10 =$	
2.	$8 \times 100 =$	
3.	$8 \times 1,000 =$	
4.	$7 \times 10 =$	
5.	$70 \times 10 =$	
6.	$70 \times 100 =$	
7.	$70 \times 1,000 =$	
8.	$6 \times 10 =$	
9.	$60 \times 10 =$	
10.	$600 \times 10 =$	
11.	$600 \times 100 =$	
12.	$600 \times 1,000 =$	
13.	$3 \times 10 =$	
14.	$20 \times 10 =$	
15.	$23 \times 10 =$	
16.	$5 \times 10 =$	
17.	$40 \times 10 =$	
18.	$45 \times 10 =$	
19.	$73 \times 10 =$	
20.	$48 \times 10 =$	
21.	$48 \times 100 =$	
22.	$48 \times 1,000 =$	

23.	$37 \times 1,000 =$	
24.	$50 \times 10 =$	
25.	$500 \times 10 =$	
26.	$500 \times 100 =$	
27.	$56 \times 100 =$	
28.	$562 \times 100 =$	
29.	$432 \times 100 =$	
30.	$700 \times 100 =$	
31.	$700 \times 1,000 =$	
32.	$760 \times 1,000 =$	
33.	$765 \times 1,000 =$	
34.	$942 \times 1,000 =$	
35.	$74 \times 10 =$	
36.	$269 \times 10 =$	
37.	$49 \times 100 =$	
38.	$328 \times 100 =$	
39.	$37 \times 1,000 =$	
40.	$924 \times 1,000 =$	
41.	$147 \times 100 =$	
42.	$825 \times 1,000 =$	
43.	$651 \times 100 =$	
44.	$192 \times 1,000 =$	