Name_____ Day 1 [redacted] Assessment

1. Write an expression for the calculation *add 34 and 6 and then multiply by 3.*

2. Complete the table.

	Add 2	Add 4
7	9	11
8		
9		
10		
11		
12		

3. $50 \times 10^2 =$

4. Write six-thousandths in standard form.

5. Write <, >, or = to make the statement true.

2.159 ◯ 2.259

6. Round 7.38 to the nearest tenth.

7. $11 \times 8 =$

8. $40 \div 8 =$

9. Nicole bought a pair of shoes for $64.26. The sales tax was $3.85. How much money did Nicole spend on the pair of shoes?

10. $\frac{3}{6} + \frac{1}{3} =$

 5.OA.2, 5.OA.3, 5.NBT.2, 5.NBT.3, 5.NBT.4, 5.NBT.5, 5.NBT.6, 5.NBT.7, 5.NF.1

Name Day 2 [redacted] Assessment

1. $6 + (6 - 2) \times 6 =$

2. Write an expression for the calculation *triple 3 and then add double 8.*

3. $250 \div 10^2 =$

4. Write ten-hundredths in standard form.

5. Write <, >, or = to make the statement true.

0.99 ◯ .009

6. Round 9.921 to the nearest hundredth.

7. $28 \times 12 =$

8. $648 \div 8 =$

9. Mario has $14.35 left in his wallet. He spent $148.43 for tablecloths. Then, he spent $92.05 for napkins. How much money did Mario have in his wallet to start with?

10. $\frac{7}{12} - \frac{2}{4} =$

5.OA.1, 5.OA.2, 5.NBT.2, 5.NBT.3, 5.NBT.4, 5.NBT.5, 5.NBT.6, 5.NBT.7, 5.NF.1

Name Day 3

[redacted] Assessment

1. Maggie buys a book for $9.95. Jeff buys a pair of socks for $7.45. How much more money does Maggie spend than Jeff?

2. $\frac{3}{8} + \frac{1}{2} =$

3. Write an expression for the calculation *add 3 and 8 and then multiply by 9.*

4. $46 \times 15 =$

5. Complete the table.

	Add 1	Add 3
7	8	10
8		
9		
10		
11		
12		

6. $20 \times 10^5 =$

7. Write 1.08 in word form.

8. Write <, >, or = to make the statement true.

.004 ◯ 4.00

9. Round 93.0129 to the nearest thousandth.

10. $240 \div 6 =$

5.OA.2, 5.OA.3, 5.NBT.2, 5.NBT.3, 5.NBT.4, 5.NBT.5, 5.NBT.6, 5.NBT.7, 5.NF.1

Name_____ Day 4 [redacted] Assessment

1. $\frac{3}{4} - \frac{5}{10} =$

2. $7 \times 4 + 8 - 2 =$

3. Molly buys a scooter for $26.99. Robert buys a basketball for $12.89. How much more money does Molly spend than Robert?

4. Write an expression for the calculation *multiply 9 and 5 and then subtract 15.*

5. $220 \div 10^2 =$

6. Write 4.002 in word form.

7. Write <, >, or = to make the statement true.

92.001 ◯ 92.001

8. Round 5.42 to the nearest tenth.

9. $215 \times 8 =$

10. $126 \div 3 =$

Name_____ Day 5 [redacted] Assessment

1. $455 \times 6 =$

2. $847 \div 7 =$

3. Denise finished the race in 5.93 minutes. If Tara rook 4.6 times as long to finish the race, how many minutes did it take her to finish?

4. $\frac{2}{3} - \frac{7}{12} =$

5. Write an expression for the calculation *the product of 4 and 4 added to double the number 5.*

6. Write 108.92 in expanded form.

7. Write <, >, or = to make the statement true.

0.08 ◯ 0.8

8. Round 62.686 to the nearest hundredth.

9. Complete the table.

	Add 3	Add 5
7	10	12
8		
9		
10		
11		
12		

10. $70 \times 10^2 =$

5.OA.2, 5.OA.3, 5.NBT.2, 5.NBT.3, 5.NBT.4, 5.NBT.5, 5.NBT.6, 5.NBT.7, 5.NF.1

First Day:

- Please read the article "Surviving the Storms." Answer the questions on page 3, T3. 1-5- Powerful Words.
- Complete the Prefix Practice 3 Worksheet. 1-8.

Second Day:

- Reread the article "Surviving the Storms," if needed. Answer the questions on page 4, T4. 1-5- Rating Hurricanes.
- Complete the "Add the Prefix" worksheet, 1-8 (top)

Third Day:

- Reread the article "Surviving the Storms," if needed. Answer the questions on page 8. 1-7- News Diagram & News Review.
- Complete the "Add the Prefix" worksheet, 1-8 (bottom)

Fourth Day:

- Complete the "RAIN" weekly paper. 1-6.
  (Make sure that you begin with number 1 and continue to go in order)

Fifth Day:

- Complete the "RAIN" weekly paper, making the T-chart on back of paper.
- Using the T-chart you created, pick a side- bad things about rain, or good things about rain. Write a short letter to the "rain man" explaining why or why he should not let it rain. Use examples from your T-chart. Remember to use complete sentences including capitalization and punctuation!

Floodwaters from Hurricane Harvey nearly cover a house in Houston, Texas.

COVER Story

Surviving the Storms

More than a month after two hurricanes raged through the southern United States, people across the region are still recovering.

The Eicher family figured they were safe. Hurricane Harvey had barreled into their home state of Texas on August 25. Three days later, heavy rain from the storm continued to hammer down. Homes across southeastern Texas were being swallowed by floods. Still, the Eichers thought their house in the city of Conroe would be spared because it was built 13 feet off the ground.

But water began creeping up their front steps and would soon reach the front door.

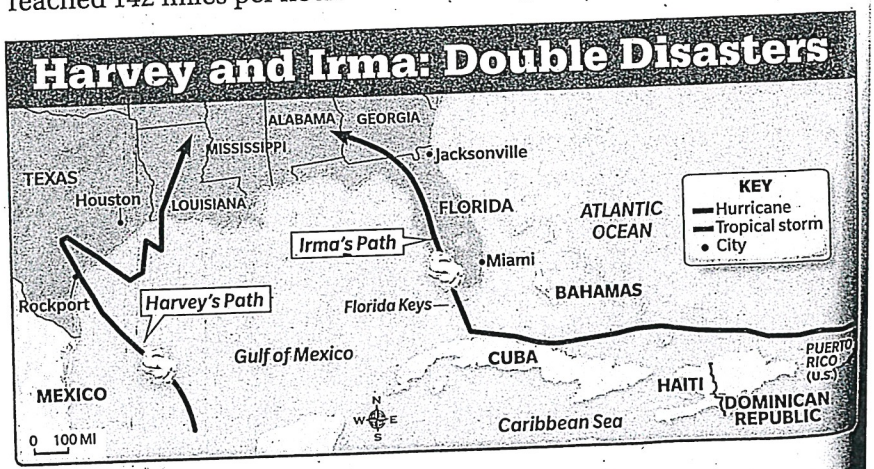
"I knew the storm was coming, but I didn't know the water would get that high," says 9-year-old Ace Eicher.

Fortunately, Ace and her family were rescued. They were among the countless people in Texas who had their lives turned upside down by Harvey. The storm **lingered** over the state for almost a week, turning highways into rivers and leaving thousands of homes underwater. At least 80 people died because of Harvey.

About two weeks after Harvey, another major storm struck the United States. On September 10, Hurricane Irma tore through Florida with violent winds that reached 142 miles per hour.

The country had never seen back-to-back disasters like this. Meteorologists (scientists who study weather) rate hurricanes on a scale from 1 to 5, according to wind speed. A Category 5 storm is the strongest. Harvey and Irma both made landfall as Category 4 storms. It was the first time two hurricanes that powerful hit the U.S. mainland in the same year.

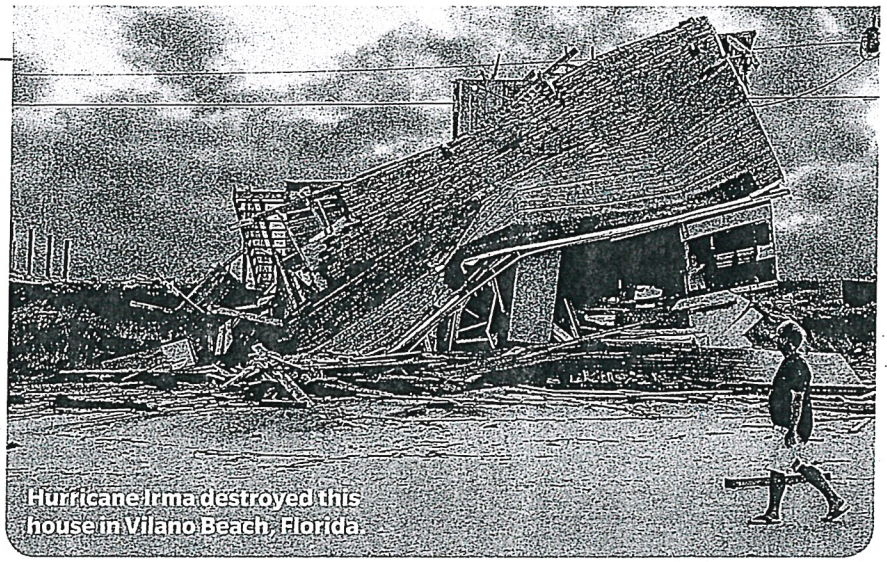
People across the South are still struggling to rebuild from the damage caused by the storms.



Words to Know

lingered *verb, past tense.* stayed in one place for a long time

ravaged *verb, past tense.* caused serious damage to



Hurricane Irma destroyed this house in Vilano Beach, Florida.

A Historic Hurricane

Harvey wasn't just powerful. It also behaved differently than most hurricanes. Instead of breaking up quickly once it reached land, Harvey stalled near Houston, Texas, for several days. The storm dumped more than 50 inches of rain near the city.

The Eichers live about 40 miles from Houston. As the floodwaters rose, they were among the tens of thousands of Texans who were left stranded. By August 28, their house looked like it was in the middle of a lake.

"I was thinking, 'What are we going to do? This is crazy,'" recalls Ace's mom, Lisa.

Luckily, firefighters arrived in a dump truck that could drive through the rising water—which was already higher than Ace's head. The firefighters helped Ace, her parents, her three siblings, and their pet dog and pig get to safety.

"I was trying to stay calm, but it was really nerve-racking," says Ace. "[The water] was really cold."

Across Texas, rescue workers and ordinary citizens used boats and trucks to rescue more than 120,000 people. Many who were rescued spent weeks living either in temporary shelters or at the homes of relatives and friends.

Irma Moves In

Meanwhile, about 900 miles away, 9-year-old Charlotte Osol and her family were bracing for Hurricane Irma. The storm had already **ravaged** islands in the Caribbean. As Irma neared Charlotte's home state of Florida, officials ordered more than 6 million residents to evacuate.

"I was pretty scared, but my mom said we had to evacuate to higher ground to be safe," says Charlotte. She lives in Ponte Vedra Beach, along Florida's east coast.

Although Irma weakened as it moved through Florida, the storm was so big that it battered the east and west coasts of the state at the same time. It tore apart homes in the Florida Keys and caused major flooding in Miami, Jacksonville, and other cities. Irma killed at least 68 people in Florida and the Caribbean.

Charlotte's family spent two days at her cousin's house, which is on higher ground. When her family returned home, they had no electricity. About 15 million people had their power knocked out by the storm.

Long Road to Recovery

Back in Texas, the hardest-hit areas may take years to recover from Harvey. Some experts say it could end up being the costliest natural disaster in U.S. history.

As for the Eichers, the first floor of their house was destroyed by the flood. They're living with Ace's grandmother while their home is being rebuilt. Friends, family, and even two of the firefighters who rescued them have helped with the repairs.

"It's going to be a long, long road," says Lisa. "But it's been really cool to see how many people have been pitching in."

—by Tricia Culligan

Below: A firefighter rescues Ace Eicher (*right, with her pet pig*) from her flooded home in Conroe, Texas.

Another Hurricane

As we went to press, another deadly hurricane, Maria, hit Puerto Rico. You can find coverage of the storm at **www.scholastic.com/sn56.**

MARCUS YAM/LATIMES VIA GETTY IMAGES (SUBMERGED HOME); JIM MCMAHON/MAPMAN® (MAP); JOHNNY MILANO/THE NEW YORK TIMES/REDUX (DESTROYED HOUSE; COURTESY OF LISA EICHER (FLOODED PORCH, ACE EICHER)

Day 1

Name: _____

SCHOLASTIC NEWS

Analyzing Word Choice
Common Core RI.4

Powerful Words

In "Surviving the Storms," the author uses vivid language to tell the story. Reread each sentence from the article and answer the questions about the descriptive language.

1 "Three days later, heavy rain from the storm continued to **hammer down**." *(paragraph 1)*	• How is *hammer down* more powerful than *fall*? What does the phrase *hammer down* make you picture in your mind?
2 "Homes across southeastern Texas were being **swallowed** by floods." *(paragraph 1)*	• How is *swallowed* more descriptive than *covered*?
3 "But water began **creeping up** their front steps and would soon reach the front door." *(paragraph 2)*	• Personification is giving human qualities or abilities to something nonhuman. How does the author's personification of the water affect the story?
4 "They were among the countless people in Texas who had their lives **turned upside down** by Harvey." *(paragraph 4)*	• What does the author mean when she says Texans' lives were *turned upside down*?
5 "Although Irma weakened as it moved through Florida, the storm was so big that it **battered** the east and west coasts of the state at the same time." *(paragraph 16)*	• What other words could the author have used instead of *battered*? Do you think *battered* was a good word choice? Why or why not?

TEACHERS: Download an interactive version of this skills sheet at **www.scholastic.com/sn56**.

page 3

Day 1

Name_____ Date_____

Prefixes Practice 3

The prefixes, *in-*, *im-*, *non-*, *un-* and *dis-* can all mean "not" or "the opposite of" Circle the correct prefix to go with the underlined base word in each sentence. Then rewrite the sentence with the new word.

1. Cody could not <u>zip</u> his coat. in- im- non- un- dis-

_____

2. Mr. Smith is a <u>smoker</u>. in- im- non- un- dis-

_____

3. Tyler needed to <u>connect</u> the wires. in- im- non- un- dis-

_____

4. Jenny is <u>mature</u> for her age. in- im- non- un- dis-

_____

5. I wanted to <u>wrap</u> the present. in- im- non- un- dis-

_____

6. Alaina sometimes <u>obeys</u> the rules in- im- non- un- dis-

_____

7. Laura thought Nelly's apology was <u>sincere</u>. in- im- non- un- dis-

_____

8. Jake knew it was <u>possible</u> to win the race. in- im- non- un- dis-

_____

Day 2

Name: _____

SCHOLASTIC NEWS

Reading a Chart
Common Core RI.7

Rating Hurricanes

In this week's cover story, you learned about the damage caused by Hurricane Harvey and Hurricane Irma. The Saffir-Simpson scale uses wind speeds to rate hurricanes. Read the chart and then answer the questions.

Saffir-Simpson Scale

Type of Storm	Wind Speeds (miles per hour)	Typical Damage
Category 1	74 to 95	Dangerous winds tear roof shingles, siding, and gutters from houses. Large tree branches may snap off. Damage to power lines can cause power outages that last several days.
Category 2	96 to 110	Extremely dangerous winds cause major damage to roofs and siding. Some trees may be uprooted and block roads. Power outages can last several days to weeks.
Category 3	111 to 129	Major damage occurs even to well-built houses. Fallen trees can block many roads. Electricity and clean water may be unavailable for several days to weeks.
Category 4	130 to 156	Well-built houses may lose roofs and outer walls. Most trees are snapped or uprooted. Fallen trees and utility poles block many streets. Power outages can last weeks to months.
Category 5	157 or higher	Many well-built houses are completely destroyed. Roofs and walls collapse. Fallen trees and utility poles block most streets. Outages can last weeks to months. People will not be able to live in the area for weeks or months.

1. **What is the highest wind speed of a Category 3 hurricane?** _____

2. **How long are power outages expected to last after a Category 2 hurricane?**

   _____

3. **Both Harvey and Irma made landfall in the U.S. as Category 4 storms. At the time each storm hit land, wind speeds reached _____ to _____ miles per hour.**

4. **As Hurricane Irma moved through Florida on September 10, its maximum wind speed fell to 105 miles per hour by 8 p.m. What type of storm was it then?** _____

5. **Hurricane Harvey caused massive flooding in addition to the typical damage from a Category 4 storm. Explain why that may have happened, using evidence from the cover story.**

   _____

   _____

TEACHERS: Download an interactive version of this skills sheet at **www.scholastic.com/sn56.**

page 4

Day 2

Name_____ Date_____

Add the Prefix

Fill in the charts by adding the prefix to the base word. If the prefix and base word do not make a real word, put an "X" in the box.

Base word	re-	mis-	un-	in-
1. match				
2. load				
3. take				
4. tied				
5. cut				
6. connect				
7. direct				
8. shape				

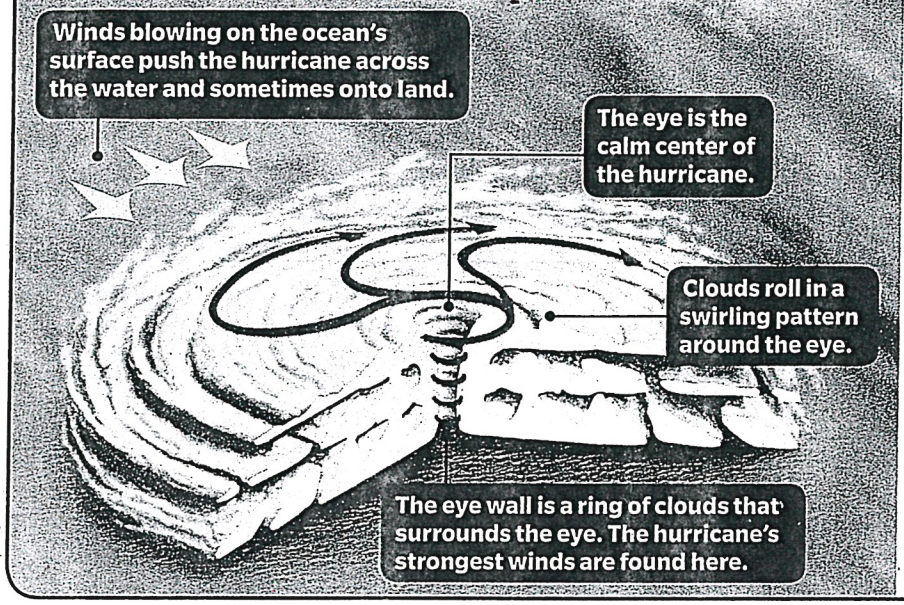
Day 3

Base word	dis-	pre-	out-	over-
1. board				
2. load				
3. take				
4. count				
5. charge				
6. view				
7. qualify				
8. order				

name Day 3

NEWS Diagram

Hurricanes form when warm air from the ocean's surface rises and meets cool air above it. This produces storm clouds, rain, and strong winds. This diagram shows what a hurricane looks like from above.



1. A hurricane forms when ____ meets ____ above it.
- Ⓐ warm air; even warmer air
- Ⓑ warm water; cool air
- Ⓒ warm air; cool air
- Ⓓ cool air; colder air

2. The eye wall is ____.
- Ⓐ the calm part of a hurricane
- Ⓑ located at the outer edge of a hurricane
- Ⓒ a type of hurricane
- Ⓓ where a hurricane's strongest winds are found

3. Describe the conditions inside the eye of a hurricane.

_____

_____

NEWS Review

Surviving the Storms pages 4-5

4. Which sentence best states the article's main idea?
- Ⓐ "The Eicher family figured they were safe."
- Ⓑ "Water began creeping up their front steps."
- Ⓒ "About two weeks after Harvey, another major storm struck the United States."
- Ⓓ "People across the South are still struggling to rebuild from the damage caused by the storms."

5. Unlike most hurricanes, Hurricane Harvey ____.
- Ⓐ brought heavy rains
- Ⓑ had strong, violent winds
- Ⓒ didn't break up quickly once it hit land
- Ⓓ was rated on a scale according to its wind speed

6. Why did the Eicher family think they might be spared from flooding?
- Ⓐ Their house was 40 miles from Houston.
- Ⓑ Their house was built 13 feet off the ground.
- Ⓒ They had evacuated to a temporary shelter.
- Ⓓ They knew firefighters would rescue them.

7. Which word is closest in meaning to *lingered*?
- Ⓐ struck
- Ⓑ remained
- Ⓒ stranded
- Ⓓ returned

page 8

Day 2

Name_____ Date_____

Add the Prefix

Fill in the charts by adding the prefix to the base word. If the prefix and base word do not make a real word, put an "X" in the box.

Base word	re-	mis-	un-	in-
1. match				
2. load				
3. take				
4. tied				
5. cut				
6. connect				
7. direct				
8. shape				

Day 3

Base word	dis-	pre-	out-	over-
1. board				
2. load				
3. take				
4. count				
5. charge				
6. view				
7. qualify				
8. order				

RAIN

Joke: When does it rain money?

Name

Date

① Umbrellas

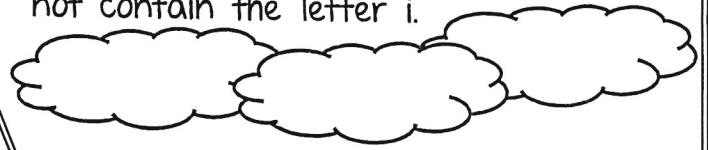
Before there were umbrellas, there were parasols. A parasol is similar to an umbrella except that it is used as protection from the sun. The main difference between an umbrella and a parasol is that an umbrella is waterproof. The first umbrellas appeared in China in the the 11th century BC. They were made from silk and only used by nobility and royalty.

What is the difference between a parasol and an umbrella?

_____

_____

② In each cloud, write a word that rhymes with the word rain, but does not contain the letter i.



③ Number these sentences from 1 to 6 to put them in the correct order.

____ He opened his umbrella.

____ Mr. Jones looked out the window.

____ He went outside.

____ He opened the door.

____ He saw that it was raining outside.

____ He got his umbrella from the closet.

④ Explain the meaning of each of these idioms:

It's raining cats and dogs: _____

When it rains it pours: _____

I don't want to rain on your parade: _____

⑤

Write each word from weakest to strongest.

_____

_____

_____

_____

⑥ The word "rain" can be a noun or a verb. Use it in a sentence for each one:

Noun: _____

Verb: _____

Now use it in a sentence as an adjective (hint: add a "y" to the end).

Adjective: _____

☆ Make a T-Chart on the back of this paper. On one side write bad things about rain and on the other side write good things about rain.

Compare and contrast, word work, sequence, figurative language, shades of meaning, parts of speech.

A: When there is a change in the weather.

I ♡ Literacy

Packet Science/ Social Studies Fifth Grade

First Day:
Read the article on weather forecasts and answer the questions.

Second Day:
Read the articles on farm products and resources and answer the questions.

Third Day:
Read the article on elements and atoms and answer the questions.

Fourth Day:
Read the article on Arkansas Industry and answer the questions.

Fifth Day:
Read the article on Economic choices and answer the questions.

How Are Weather Forecasts Made?

Gases surrounding the Earth are called the atmosphere. When the atmosphere changes, weather changes. People use different tools to learn what the weather will be like.

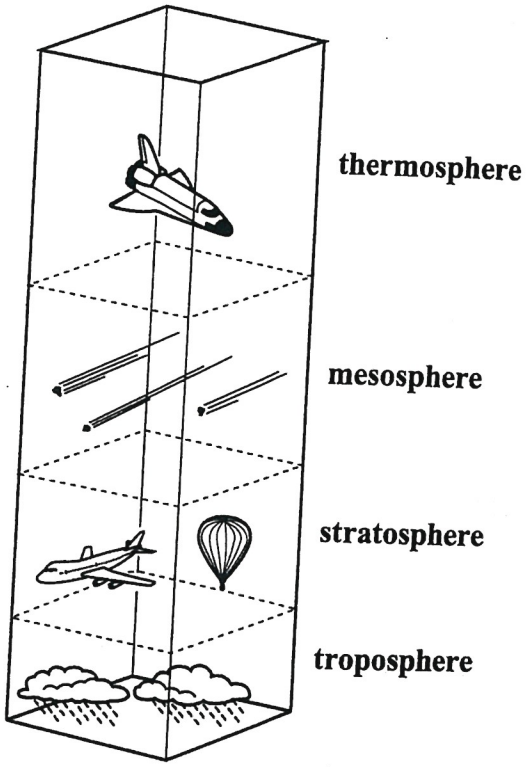
Composition of Earth's Atmosphere

Earth's atmosphere is a mixture of gases that surrounds the planet like a blanket. It is mostly made up of two gases, nitrogen and oxygen. Carbon dioxide is a gas that is also in the atmosphere. When fossil fuels are burned on Earth, the amount of carbon dioxide goes up.

Structure of the Atmosphere

Earth's atmosphere has four layers. Each layer has a different temperature. The farther away a layer is from Earth, the colder it is. These layers cause air pressure, which affects Earth's weather.

The troposphere is the layer closest to Earth. This is where almost all weather takes place. It is the thinnest layer, but most of the gases in the atmosphere are in it. The next layer up is the stratosphere. It helps protect life on Earth from the sun's radiation. The third layer, the mesosphere, is the coldest part of the atmosphere. The fourth layer, the thermosphere, is the first part of the atmosphere that sunlight hits.



Air Masses

An air mass is a body of air that has roughly the same temperature and moisture throughout. Some air masses are warm, while others are cold. Air masses also have different amounts of moisture. Some are dry, while others are moist. The amount of moisture depends on where the air mass is formed.

Continental air masses form over land and are dry. They usually bring fair weather. Maritime air masses form over water and are moist. They often bring fog and rain to coastal areas. They also bring moisture to the middle of the country.

Name _____ Date _____

How Are Weather Forecasts Made?

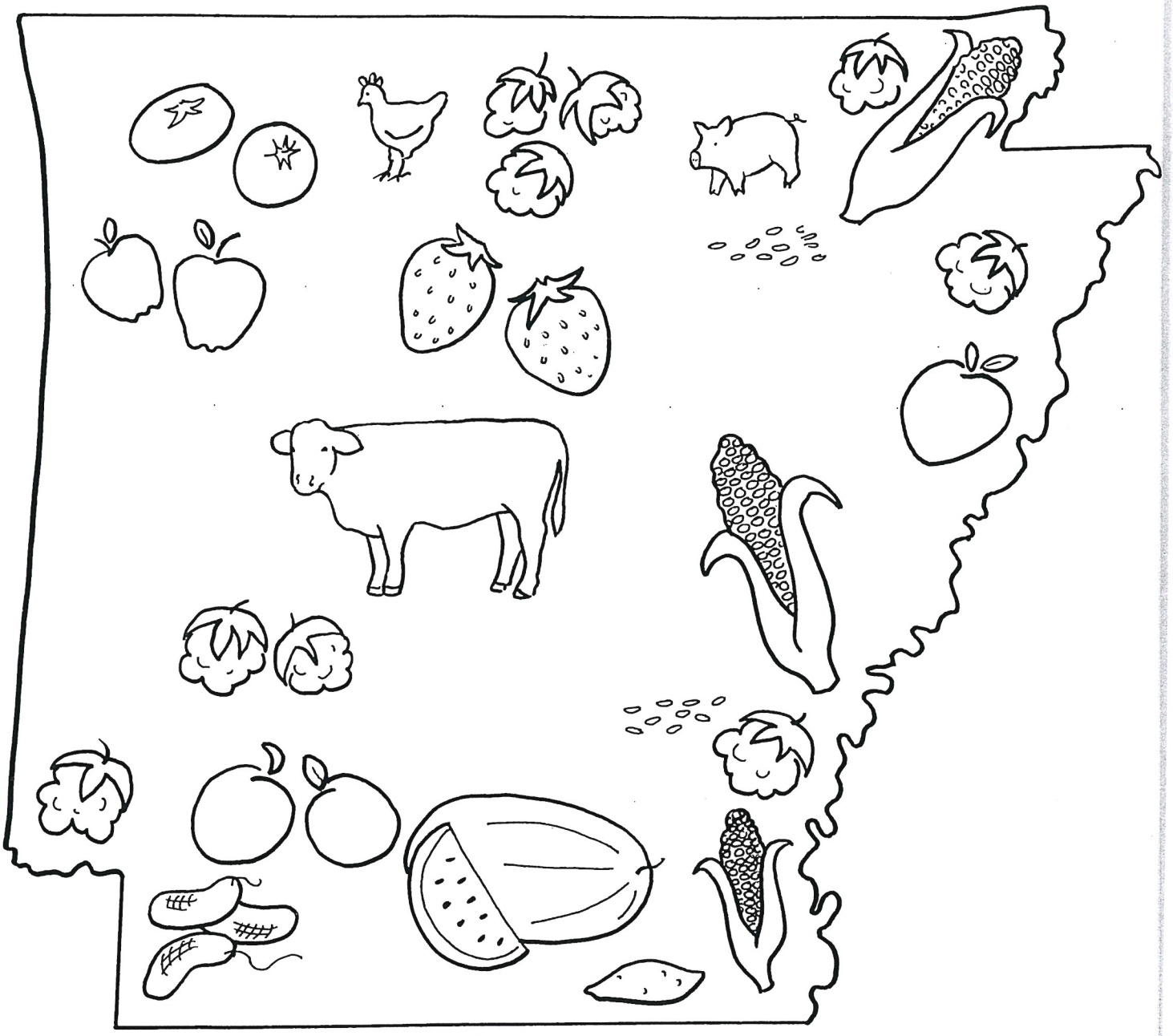
Fill in the blanks.

1. Earth's atmosphere is made up mostly of ① _____ , ② _____.
2. The _____ is where almost all weather takes place.
3. The _____ protects life on Earth from the sun.
4. _____ air masses form over water and are moist.
5. When _____ air masses move into an area, they generally bring fair weather.
6. A warm front generally brings ① _____ , ② _____.
7. _____ can be used to create an image of a storm.
8. _____ orbit high above Earth and use instruments to gather data from the upper atmosphere.

9. **Main Idea** What are the four main layers of Earth's atmosphere?

① _____ ③ _____

② _____ ④ _____



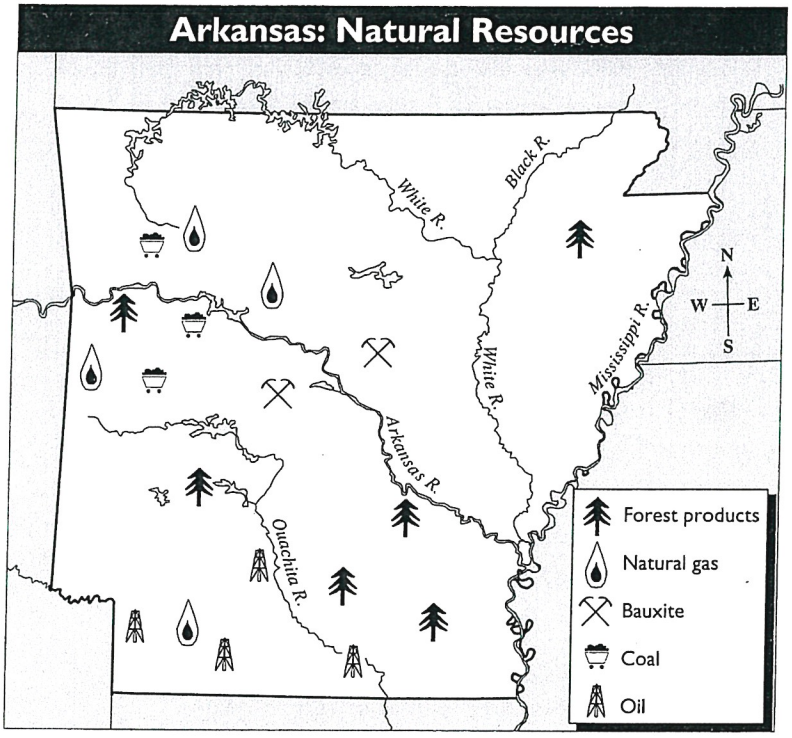
Arkansas became a garden of plenty because of the hard work of its pioneer families. They raised apples, tomatoes, strawberries, corn, rice, peaches, peanuts, and watermelons. They also produced cattle, hogs, and chickens. And they grew cotton to make cloth and other products.

Name _____

NATURAL RESOURCES

Natural resources are things that are provided by nature and are useful to people. Arkansas has many natural resources such as water, trees, and minerals.

Arkansas's rivers and lakes are used for irrigation, drinking water, recreation, and to create electrical power. Most of these lakes were created by damming rivers. Arkansas is famous for its hot and cold water springs. In fact, the city of Hot Springs is named for its famous springs that bubble up from the ground. The springs reach 143° F.



About half of Arkansas is covered with forests, which provide lumber for construction, furniture making, and paper products. Forests are a renewable resource. That means that new trees can be planted to replace those that are cut down for lumber.

Many types of mineral deposits can be found in Arkansas, including large deposits of coal, oil, and natural gas. Arkansas also has large deposits of bauxite, a mineral used to make aluminum.

Use the text and the map to answer these questions.

1. What are natural resources? _____
2. What mineral is used to make aluminum? _____
3. Is oil found in the northern or southern part of Arkansas? _____

   Is coal found in the eastern or western part? _____

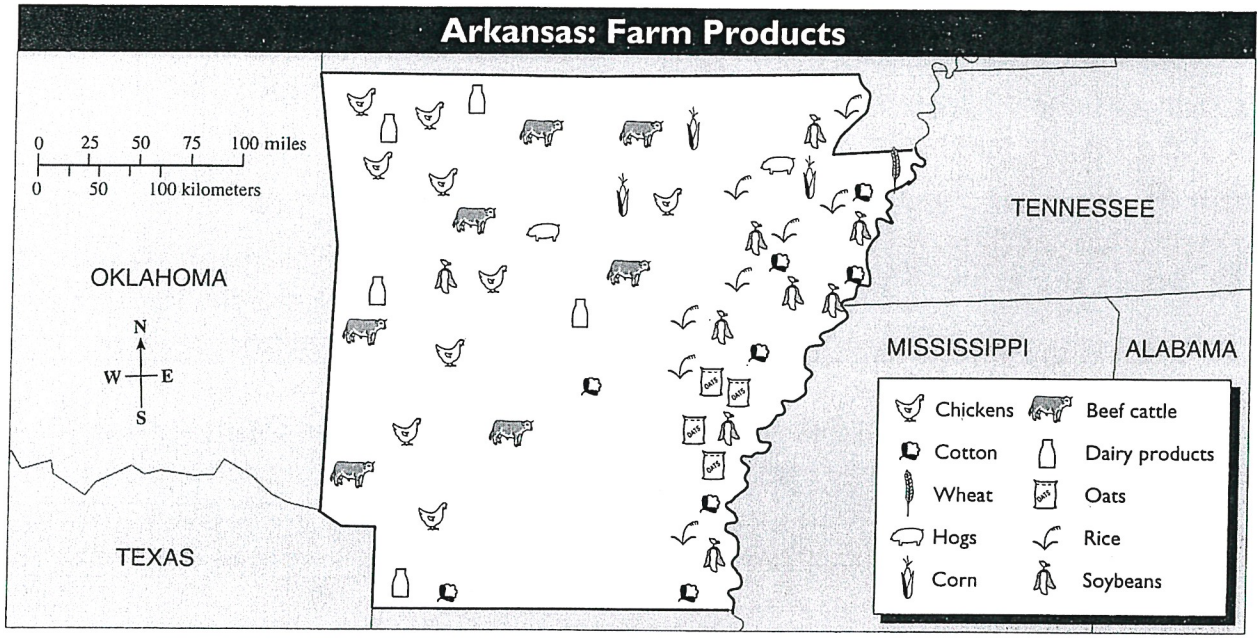
Critical Thinking Do you think coal is a renewable resource? Why or why not? Explain your answer on the back of this work sheet.

Name _____

FARM PRODUCTS

Farmland covers nearly half of Arkansas. Some Arkansas farmers raise livestock, which are animals. Others grow crops, which are plants. Broilers, or young chickens, are the leading livestock product. Arkansas produces more broilers than any other state. Beef cattle is the state's second most important livestock product.

The most valuable crop in Arkansas is soybeans. The second most valuable is rice. Arkansas grows about one third of the rice used in the United States.



Use the text and the map to answer these questions.

1. What is the most valuable crop in Arkansas? _____

2. What does each of the following symbols stand for?

   a. _____ b. _____

   c. _____ d. _____

3. In how many places does the map show that hogs are raised? _____

Critical Thinking Using what you know about Arkansas geography, explain why most crops are grown in eastern Arkansas. Write your answer on the back of this work sheet.

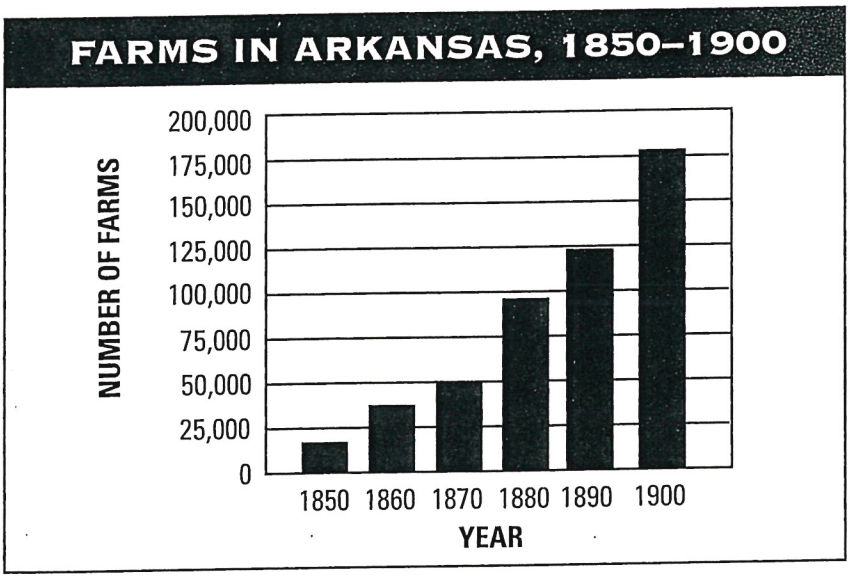
NAME _____ DATE _____

EARLY FARMS IN ARKANSAS

DIRECTIONS: Read the paragraphs below, and study the bar graph. Then use the graph to answer the questions.

Life for the early farmers of Arkansas was not easy. They worked long hours and raised just enough food to feed their families. Until the 1830s farmers did not grow much of a **surplus**, or extra amount, of crops. Therefore, they made little money from their hard work.

Then several things happened to change the lives of farmers. Inventors came up with new ways to harvest crops. Often these new ways meant using new machines to do work more quickly. Farmers also learned how to add chemicals to the soil to make crops grow better. Farmers were able to produce much more than ever before. This meant that the farmers could raise crops to sell and make money. Because of these changes, more Arkansans began farming. The number of farms in the state rose greatly.



1. In 1850 about how many farms were there in Arkansas? _____
2. In 1890 about how many farms were there in Arkansas? _____
3. About how many more farms were there in 1890 than in 1850? _____
4. In which ten-year period did the number of farms increase the most? _____

_____

5. Did the number of farms increase more between the years 1860 and 1870 or between the years 1870 and 1880? _____

What Are Elements?

Elements and Atoms

All matter is made up of elements, substances that cannot be broken apart into other substances. An atom is the smallest particle of an element that still has the properties of that element. Atoms are too small to be seen with a light microscope.

Organization of Atoms

Atoms contain negatively charged particles called electrons. Atoms also have a small core in the middle called the nucleus. Electrons move quickly around the nucleus, which is made of particles called protons and neutrons. Protons have a positive charge. Neutrons have no charge. The number of protons in an atom is usually the same as the number of electrons.

Atoms of a certain element all have the same number of protons in the nucleus, but the number of neutrons may vary.

Carbon is found in nature in many forms with different properties. This happens because carbon atoms can be put together in many different ways. Graphite, the "lead" in most pencils, is a form of carbon. The carbon atoms are grouped in rings of six atoms each.

Diamond is another form of pure carbon. It is the hardest natural substance on Earth because the carbon atoms are packed tightly together. No matter what form it takes, the element carbon is made up of atoms that all have the same number of protons.

Elements Alone and Joined

Most atoms join with other atoms to form molecules. A molecule is two or more atoms joined together by forces called chemical bonds. In a molecule, the atoms in some ways act together as one part. Some molecules are made up of one or more than one element. The oxygen in the air you breathe has two oxygen atoms. A molecule of water has two hydrogen atoms and one oxygen atom.

An element's properties come from the atoms that make up that element. Some properties are color, hardness, and density. The element copper is a shiny metal that can be stretched into wires. The element silver is a shiny metal that is soft enough to be formed into things like bracelets and rings. The element helium in balloons is less dense than air, causing the balloons to float. The element aluminum is a shiny metal. It is strong, but it does not weigh very much.

Name _____ Date _____

What Are Elements?

Match each definition to its term.

Definitions

____ **1.** a substance that cannot be broken apart into other substances

____ **2.** the smallest particle of an element that still has the properties of that element

____ **3.** the negatively charged particles that make up part of every atom

____ **4.** the central core of an atom

____ **5.** a particle in the nucleus with a positive charge

____ **6.** a particle in the nucleus with no charge

____ **7.** two or more atoms joined by chemical bonds

Terms

a. electrons

b. nucleus

c. proton

d. molecule

e. neutron

f. element

g. atom

Fill in the blanks.

8. In 1869, Russian chemist Dmitri Mendeleev developed a way to classify

_____.

9. The modern periodic table is a table in which the elements are arranged by their

_____.

10. Elements are arranged in order of increasing _____ number, which is the number of protons in the nucleus.

11. The colors of the boxes show whether elements are _____,

_____, or _____.

12. _____ have properties of both metals and nonmetals.

Name _____ Date _____

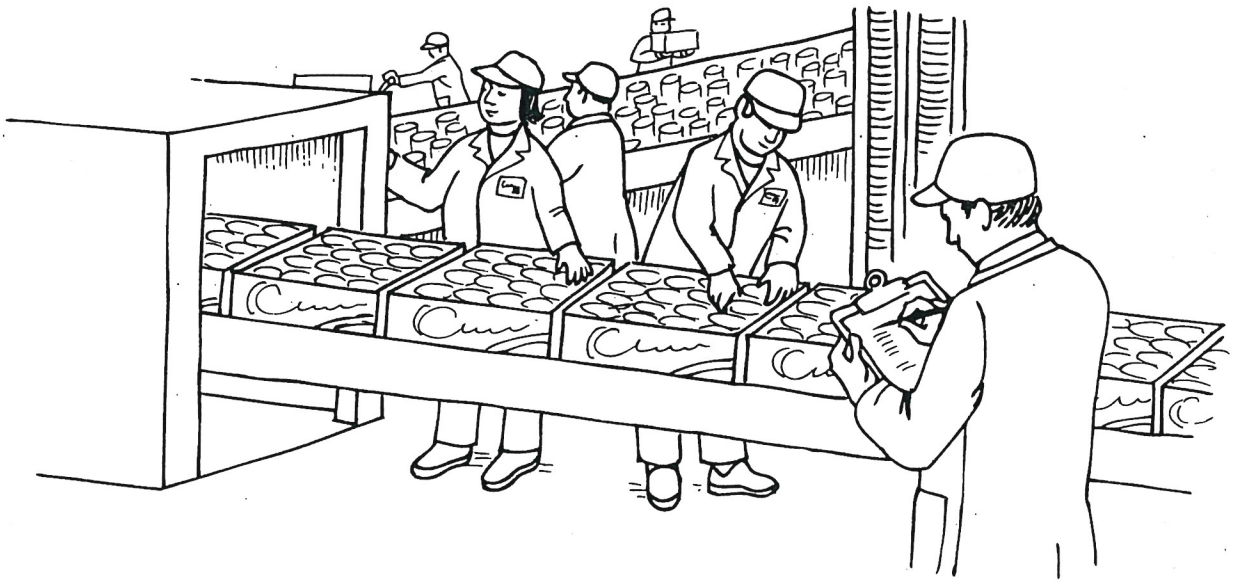
Arkansas Industry

Read the paragraphs about how industry has developed in Arkansas.

Before World War II most Arkansans depended on agriculture to earn a living. Agriculture is still an important way to earn a living in Arkansas, but industries are also important. Industrial growth has helped to make Arkansas's economy stronger. An **economy** is the business affairs of a country or area. Industries important to Arkansas's economy include poultry processing, transport and trucking, tourism, and retail store chains. Businesses in Arkansas export goods including rice, poultry, and auto parts to other states and countries.

Government agencies are organizations formed by federal, state, or local governments to manage projects and solve problems. In 1955 the Arkansas Industrial Development Commission (AIDC) was formed to find ways to improve industry in Arkansas. The AIDC encouraged companies to move to Arkansas. Once businesses arrive in Arkansas, they strengthen the economy by providing jobs. Business leaders and government agencies have worked together to improve Arkansas's economic growth.

Business leaders, some of whom are entrepreneurs, have also helped to improve Arkansas's economic growth. An **entrepreneur** is someone who takes on the risk that can come with a business venture. In 1962 business pioneer Sam Walton opened the first of many large retail stores in Rogers. He is one of Arkansas's most famous entrepreneurs. Today his retail chain has stores throughout the world.



Name _____

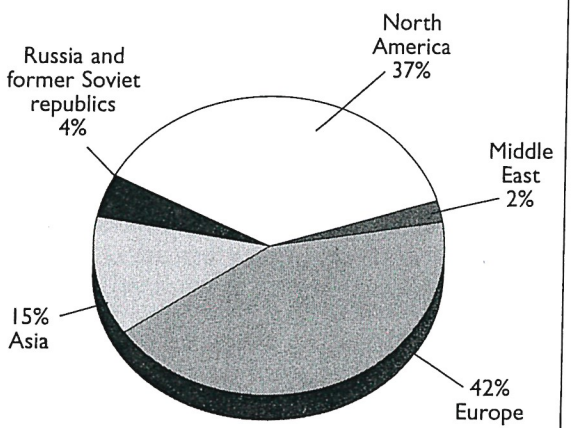
THE LUMBER INDUSTRY IN ARKANSAS

During the late 1800s, construction in Arkansas threatened its forests. Trees were cut down at an alarming rate to construct homes, businesses, and railroads. By the early 1900s, a large part of Arkansas's forests had been stripped of trees. Today, many farmers grow trees to make lumber. With its replanting projects and careful conservation, Arkansas is once again a national leader in the lumber industry.

There are three major forest regions in Arkansas. The northwest forest region contains a mixture of pine and hardwood trees. Pine and loblolly trees are generally found in forests in the southwest part of the state. The eastern forest region has mainly hardwood trees.

Lumber is very important to the state's economy. Arkansas earns over $400 million each year by selling lumber to private companies, other states, and foreign countries. Much of this wood is used to make furniture, crates, and paper products.

Arkansas: Lumber Exports



▶ **Use the information in the text and the circle graph to answer the following questions.**

1. What have Arkansans done to make their state a leading lumber producer again?

_____

2. What trees are usually found in the southwest region? _____

_____

3. Which group of countries imports the most lumber from Arkansas? _____

Which group imports the least? _____

▶ **Writing Activity** Research information about hardwood trees. On the back of this work sheet, write a paragraph about one kind of hardwood that is found in Arkansas and draw a picture of its leaf.

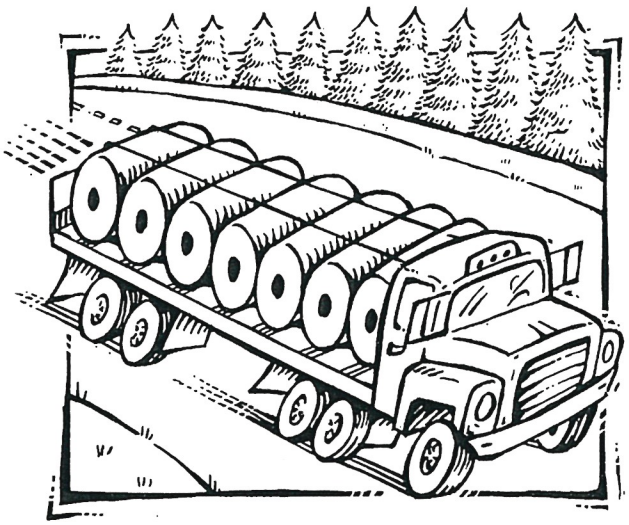
Name _____

ARKANSANS AT WORK

The industry that employs the most workers in Arkansas is manufacturing. Of the nearly 1 million workers in Arkansas, about one fourth of them manufacture, or make, a product to sell.

Packaged foods, such as chicken, rice, canned vegetables, and soft drinks account for most of the state's manufactured products. Arkansas packages more chicken and more rice than any other state. Large food-processing plants can be found in Batesville, Berryville, and DeQueen.

An abundance of natural resources has attracted several new industries to Arkansas in recent years. Manufacturers of electrical equipment, chemicals, and aluminum products have been attracted by Arkansas's wealth of mineral deposits. Factories in Jacksonville, Jonesboro, and Little Rock make electric motors, light bulbs, and televisions.



Wood from Arkansas's plentiful forests is used to manufacture furniture, lumber for construction, and paper products. Many of these products are made in Crossett and Fordyce.

Use the text to answer the following questions.

1. Name some packaged foods that are manufactured in Arkansas. _____

_____

2. What has attracted many industries to Arkansas? _____

_____

3. What kinds of products are made of wood harvested from Arkansas's forests?

_____

Critical Thinking On the back of this work sheet, list products that you have used in the last week that could have been manufactured in Arkansas.

Name _____ Date _____

Making Economic Choices

Read the paragraphs about making economic choices.

An economy is based on the buying and selling of goods and services. Goods are items that can be grown, mined, or manufactured. Services are jobs or work that aid someone or something.

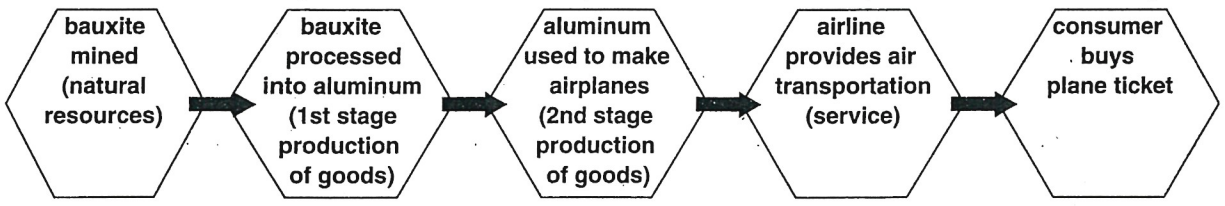
Production is the process of making goods. Before goods reach the consumer, or user, several production stages are often needed. The process begins with natural resources, or materials found in nature. Some natural resources are raw materials. A raw material is a substance that has not yet been turned into a usable form. Raw materials include timber and metal ore. Timber might be processed into usable goods such as lumber or other wood products. Ore can be processed to make metal products and construction materials.

Some of these processed goods are ready for the consumer, but others need to be processed again. For example, two or more ores may be melted and mixed together to make a metal alloy. The alloy is then molded or shaped into bars or beams for use in construction.

When people need goods or services, they pay money in exchange for the goods or service. The cost can depend upon the scarcity of natural or human resources. Scarcity refers to the availability of resources. When goods and services are very hard to find, or very *limited,* the cost sometimes goes up.

Consumers must make choices about how they will use their money. A consumer who has $20 must decide if he or she will purchase something or save the money. Local, state, and federal governments must also make choices because of limited resources. For example, a local government might need to choose between building a new school or a new library. They would need to decide which facility the community needs most.

Production Flow from Producer to Consumer



The diagram shows the production flow from the producer's first production stage through delivery to the consumer.

Name _____ Date _____

Make a list of choices your local, state, or national governments might need to make because of limited resources. Refer to the paragraphs and diagram on page 25 if you need help.

_____

_____

_____

Research one industry important to Arkansas's economy. Use the following organizer to guide your research. ***(Hint: If your industry is a service industry, think about the goods required to provide the service.)***

Industry being researched:
Raw materials needed:
Main location(s) of industry:
Number of people employed by industry:
Specific goods or services produced by the industry:

Choose one of the specific goods or services listed above and answer the following questions:

Are raw materials limited? Why or why not?

What choices do producers need to make because raw materials are limited?

How would you advertise this good/service? Create an advertising campaign that will make consumers want to buy the good/service.