

# Instructions for Copying

Answers are printed in non-reproducible blue. Copy pages on a light setting in order to make multiple copies for classroom use.

## LIFE SCIENCE

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# What Living Things Need

Fill in the labels as you read the chapter.

flower  
leaves

predator  
prey

roots  
stem



\_\_\_\_\_

\_\_\_\_\_

# A Look at Living Things

Use your book to help you fill in the blanks.

## What do living things need?

1. All living things have needs they must meet in order to \_\_\_\_\_ and change.
2. Most animals need to breathe air, drink \_\_\_\_\_, and eat food to grow.
3. Plants are \_\_\_\_\_ things, too.
4. Plants also change and \_\_\_\_\_ over time.
5. Even the smallest parts of living things need food, water, and \_\_\_\_\_.

## How do living things get what they need?

6. Plants use their parts to make their own \_\_\_\_\_.
7. Animals use their \_\_\_\_\_ to get the food they need to grow.

**Where do living things get their features?**

8. Animals have \_\_\_\_\_ that look and act like their parents.
9. You can describe living things by their \_\_\_\_\_.
10. When plants make more of their own kind, they \_\_\_\_\_.
11. Most living things look and \_\_\_\_\_ like their parents, but all living things differ in some ways.

**Critical Thinking**

12. How do the parts of a plant help it get what it needs to live?

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# A Look at Living Things

Choose a word from the box to answer each riddle.

air	roots	feature
leaves	stem	

1. I can be used to describe living things. What am I?

\_\_\_\_\_

2. I help a plant take in air and sunlight. What am I?

\_\_\_\_\_

3. Food and water travel through me to get to all parts of the plant. What am I?

\_\_\_\_\_

4. I help a plant take in minerals from the ground.  
What am I?

\_\_\_\_\_

5. You breathe me in so you can live. What am I?

\_\_\_\_\_

# A Look at Living Things

Fill in the blanks. Use the words from the box.

leaves  
reproduce

roots  
stem

sunlight  
water

young

Plants, animals, and people all need food, air, water, and space to live. Plants need \_\_\_\_\_, too.

Animals and people must eat plants or other animals to get what they need, but plants have parts that help them make their own food. The

\_\_\_\_\_ hold the plant in the ground. They also take in \_\_\_\_\_ from soil.

Food and water travel through the \_\_\_\_\_ to reach all parts of the plant. The \_\_\_\_\_ take in air and sunlight to make food.

When living things \_\_\_\_\_, they make more of their own kind. Most living things have \_\_\_\_\_ that look and act like their parents.

# Places to Live

Use your book to help you fill in the blanks.

## What is a habitat?

1. A \_\_\_\_\_ is a place where plants and animals find what they need to live.
2. Animals need \_\_\_\_\_, water, and shelter to live.
3. Plants need \_\_\_\_\_, water, and sunlight to live.
4. Some habitats are \_\_\_\_\_ and others are warm.
5. Habitats may be \_\_\_\_\_ or dry.

**How do living things use their habitats?**

6. Living things find \_\_\_\_\_ and shelter in their habitats.
7. Some animals eat the \_\_\_\_\_ that grow in their habitats.
8. Some animals eat other \_\_\_\_\_ that live in their habitats.

**Critical Thinking**

9. How do you think a snake survives in a very dry, sunny habitat?

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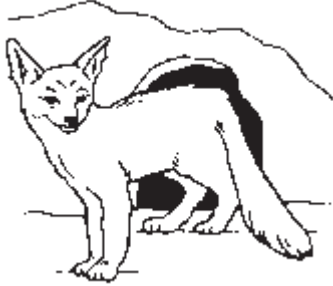
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## Places to Live

Use *habitat* and *shelter* to tell how each stays safe.

1.



**fox**

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2.



**cactus**

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3.



**spider**

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# Places to Live

Fill in the blanks. Use the words from the box.

habitat  
plants

shelter  
sunlight

tunnels

Where can plants and animals live? Living things can live in any \_\_\_\_\_ where they get what they need to survive. Plants need soil, nutrients, water, and \_\_\_\_\_ from their habitats in order to grow. Animals need food, water, and \_\_\_\_\_ from their habitats in order to grow.

Plants and animals use their habitats in different ways. Some animals eat the \_\_\_\_\_ and animals that live in their habitats. Other animals dig \_\_\_\_\_ in the soil to hide from animals that want to eat them.

# Main Idea and Details

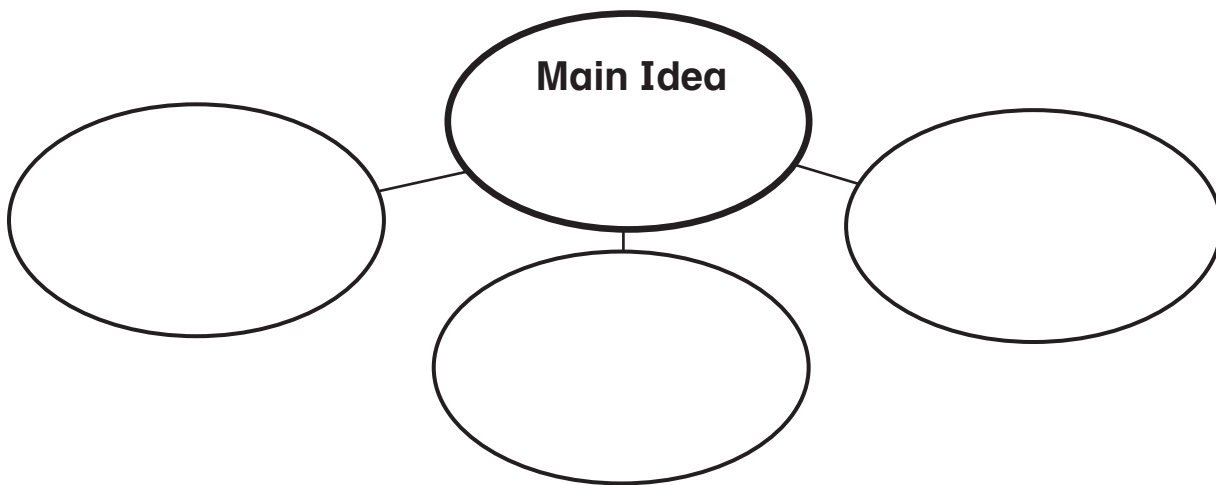


## Write About It

On a separate piece of paper, write a paragraph about a flower that you observed. Include a main idea and details.

## Getting Ideas

Write the name of a flower in the Main Idea oval.  
Write a detail about the flower in each detail oval.



## Planning and Organizing

Hector wrote three sentences about a sunflower.  
Write Detail if the sentence tells a detail. Write Main Idea if the sentence tells the main idea.

1. \_\_\_\_\_ T sunflower is big.
2. \_\_\_\_\_ A sunflower has seeds.
3. \_\_\_\_\_ A sunflower is useful.

**Drafting**

**Write a sentence that tells the main idea about your flower.**

\_\_\_\_\_

**On a separate piece of paper, write a whole paragraph. Give details about your flower.**

**Revising and Proofreading**

**Hector wrote some sentences. Use the words in parentheses ( ) to combine his sentences.**

1. Sunflowers are easy to grow. They need a lot of room. (but)
- \_\_\_\_\_
- \_\_\_\_\_

2. Birds like sunflower seeds. People like them, too. (and)
- \_\_\_\_\_

3. The seeds are very healthful. They make a good snack. (so)
- \_\_\_\_\_

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I include the main ideas and details?
- ▶ Did I correct all mistakes?



# Tennessee Habitats

Use your book to help you fill in the blanks.

**What kinds of habitats are found in Tennessee?**

1. The land in Tennessee has many different \_\_\_\_\_ .
2. Some regions of Tennessee have low \_\_\_\_\_ or flat areas.
3. Rolling hills covered with \_\_\_\_\_ grasses and small plants are called \_\_\_\_\_.
4. Other parts of Tennessee have high \_\_\_\_\_.
5. These mountains are a small part of the \_\_\_\_\_ Smoky Mountains.
6. Most mountains and valleys in Tennessee are covered by \_\_\_\_\_ forest. This is a land habitat that gets enough rain and sunlight for trees to grow well.
7. Tennessee also has many water habitats. Some of these are \_\_\_\_\_ and streams.

8. Other water habitats have water that does not move. A \_\_\_\_\_ is a small body of water that does not flow.
9. A \_\_\_\_\_ is a large body of water that does not flow.

### **What living things are found in Tennessee habitats?**

10. The woodland forests in Tennessee are home to deer, black \_\_\_\_\_, foxes, birds, and insects.
11. Tall trees, small shrubs, and tiny \_\_\_\_\_ are also found here.
12. Many kinds of \_\_\_\_\_ live in the streams, lakes, and ponds of Tennessee.
13. Frogs, \_\_\_\_\_, and insects live there, too.

### **Critical Thinking**

14. How can water get into a lake if the water in the lake does not flow?

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# Tennessee Habitats

**Read the word in each box.**

Color the box green if it tells about Tennessee land habitats.

Color the box blue if it tells about Tennessee moving water habitats.

Color the box purple if it tells about Tennessee water habitats that are not moving water.

<b>rolling hills</b>	<b>barrens</b>	<b>ponds</b>	<b>Tennessee River</b>
<b>rivers</b>	<b>lakes</b>	<b>woodland forest</b>	<b>Great Smoky Mountains</b>

# Tennessee Habitats

Fill in the blanks. Use the words from the box.

barrens	habitats	pond	streams	woodland
foxes	lake	rivers	wildflowers	worms

Tennessee has many different \_\_\_\_\_ . Some parts of Tennessee have low hills. Low hills covered with tall grasses and small plants are called \_\_\_\_\_ .

Other parts of Tennessee have high mountains. Most mountains and valleys in Tennessee are covered by \_\_\_\_\_ forest. Tall trees, small shrubs, and tiny \_\_\_\_\_ grow there. Deer, black bears, and \_\_\_\_\_ live in woodland forests. Birds, insects, and \_\_\_\_\_ live there, too.

Tennessee has moving water habitats. These are \_\_\_\_\_ and \_\_\_\_\_ .

Tennessee has other water habitats, too. A \_\_\_\_\_ is a small body of water that does not flow. A \_\_\_\_\_ is a large body of water that does not flow.

# Food Chains and Food Webs

Use your book to help you fill in the blanks.

**What is a food chain?**

1. A \_\_\_\_\_ is a model of the order in which living things get the food they need.
2. The \_\_\_\_\_ is at the beginning of most food chains.
3. Plants need sunlight in order to grow, and \_\_\_\_\_ may eat plants in order to live.
4. Some food chains involve animals that live in the \_\_\_\_\_, while others involve animals that live on land.
5. Some animals eat \_\_\_\_\_ and animals that are no longer living.
6. Animals such as \_\_\_\_\_ break up dead things into smaller pieces.
7. A \_\_\_\_\_ is an animal that hunts and eats other animals.
8. Animals that are hunted are called \_\_\_\_\_.

**What is a food web?**

9. A \_\_\_\_\_ is two or more food chains that are connected.

10. Sometimes, one kind of \_\_\_\_\_ is food for many animals.

**Critical Thinking**

11. Describe a food chain that ends with a bird.

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# Food Chains and Food Webs

These pictures show living things in a food chain.  
Match each predator from the right column with its  
prey in the left column.

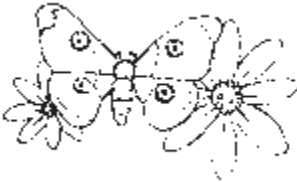
## Prey

1.



mouse

2.



moth

3.



salmon

4.



rattlesnake

## Predators

a.



owl

b.



brown bear

c.



kingsnake

d.



toad

# Food Chains and Food Webs

Fill in the blanks. Use the words from the box.

break  
food chain

food web  
plants

predator  
prey

study  
Sun

Different living things need different kinds of food in order to survive. A \_\_\_\_\_ shows what an animal eats and where its food comes from. Scientists \_\_\_\_\_ food chains to learn more about living things in our world.

Most food chains start with the \_\_\_\_\_. Plants use light and heat from the Sun to grow, then animals eat the plants. A \_\_\_\_\_ is an animal that eats other animals. An animal that is hunted by a predator is called \_\_\_\_\_.

Some living things eat nonliving \_\_\_\_\_ and animals. They \_\_\_\_\_ down the dead parts into pieces that become part of the soil. One kind of animal can be food for many animals. A \_\_\_\_\_ shows how different food chains are connected. You are part of a food web too!



# A Food Web for Lunch



## Write About It

Explain how Emma, the chicken, the lettuce, and the wheat form a food web. Think about the food chains in Emma's lunch to help you form a food web of your own lunch.

## Getting Ideas

Create a food web for your lunch. List food chains.

## Planning and Organizing

Put the steps of each food chain in the correct order.

\_\_\_\_\_ Emma eats chicken.

\_\_\_\_\_ The beetle eats wheat.

\_\_\_\_\_ The chicken eats a beetle.

**Drafting**

**Write a sentence to explain the food web. Tell your main idea.**

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**Now write how the foods in Emma's lunch form a food web. Start with the sentence you wrote above. Explain how the foods are connected.**

**Revising and Proofreading**

**Zack wrote some sentences. He made five mistakes. Find the mistakes. Then correct them.**

The Sun is the most important part of the food web. It gives energie to plants. The plants is eaten by the animals. Some animals then produce food. Chickens lay eggs. cows produce milk. Farmers gather the eggs for people to eat. Farmers also milk cows and bottle the milk. People drink the milk

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I explain the food web in Emma's lunch?
- ▶ Did I tell the steps in order?
- ▶ Did I correct all mistakes?

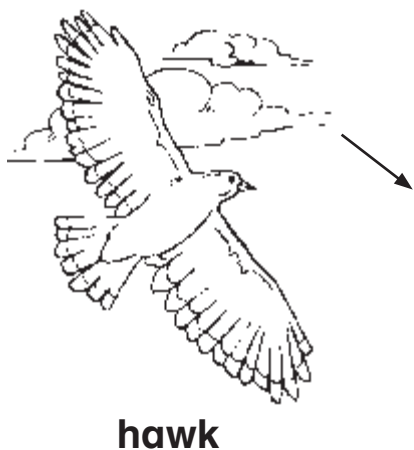
# What Living Things Need

Fill in the blanks. Use the words in the box.

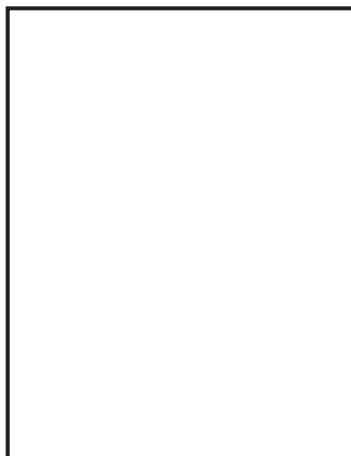
barrens	lake	reproduce
food chain	pond	shelter
food web	predator	woodland forests
habitat	prey	

1. An animal that hunts is a \_\_\_\_\_ and what it eats is \_\_\_\_\_.
2. A \_\_\_\_\_ shows what an animal eats and several of these form a \_\_\_\_\_.
3. A \_\_\_\_\_ is where animals and plants live.
4. Bodies of still water include \_\_\_\_\_ and \_\_\_\_\_.
5. An animal is safe in its \_\_\_\_\_.
6. Two of Tennessee's habitats are \_\_\_\_\_ and \_\_\_\_\_.
7. When a plant or animal has more of its own kind, we say it \_\_\_\_\_.

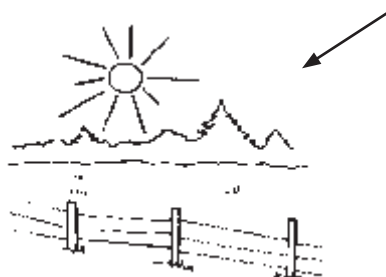
**Draw pictures to complete the food chain.**



**hawk**



**grasshopper**



**Sun**

**1. What is at the beginning of this food chain?**

\_\_\_\_\_

**2. Is the animal that comes after the grasshopper a kind of predator or a kind of prey? Explain.**

\_\_\_\_\_

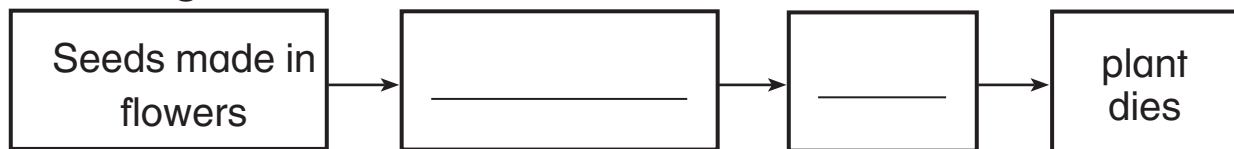
\_\_\_\_\_

\_\_\_\_\_

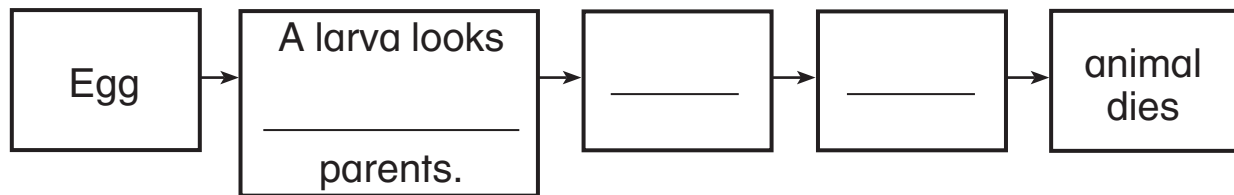
# How Living Things Grow

Complete the chart below to show the stages in the life cycles of some plants and animals. Some answers have been completed for you.

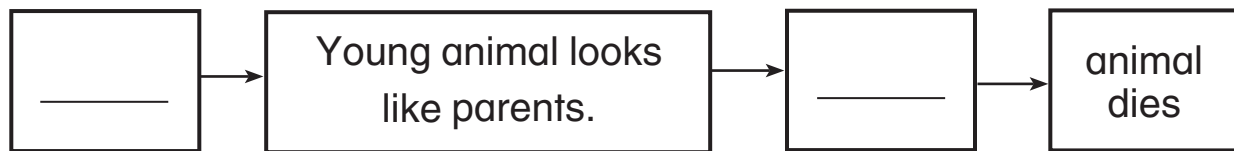
## Flowering Plants



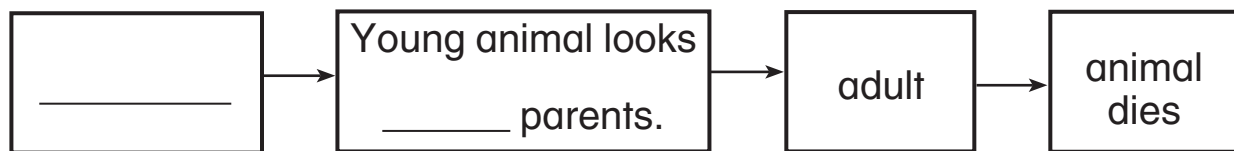
## Butterflies and Most Other Insects



## Chickens



## Pandas



# Plants Make New Plants

Use your book to help you fill in the blanks.

## Where do seeds come from?

1. Seeds are made inside a \_\_\_\_\_
2. A \_\_\_\_\_ is a special plant part that can grow into a new plant.
3. Sometimes a flower will \_\_\_\_\_ seeds inside a fruit.
4. Flowers also make \_\_\_\_\_, the sticky powder that helps them make seeds.
5. Bees and \_\_\_\_\_ can help move pollen from flower to flower.
6. Wind and \_\_\_\_\_ from rain can move pollen, too.

## How do seeds look?

7. Seeds can have many \_\_\_\_\_ and shapes, just like plants.

8. All seeds have seed \_\_\_\_\_ to protect them from drying out.

### How do seeds grow?

9. The way plants grow, live, and \_\_\_\_\_ is called their life cycle.
10. The \_\_\_\_\_ of a plant begins with a seed.
11. Most seeds need \_\_\_\_\_, water, food, and a little heat to become new plants.
12. A new plant has the same life cycle as its \_\_\_\_\_ plant.

### Critical Thinking

13. How are new plants that grow from seeds like their parent plants?

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# Plants Make New Plants

Read the sentences below. Write **TRUE** if the sentence is true. Write **NOT TRUE** if the sentence is false.

1. \_\_\_\_\_ Inside a seed, there is a sticky powder called pollen.
2. \_\_\_\_\_ Part of a flower can turn into fruit.
3. \_\_\_\_\_ The fruit protects the seeds inside it.
4. \_\_\_\_\_ A life cycle shows how a plant grows, lives, and dies.
5. \_\_\_\_\_ An adult plant can grow into a seedling.
6. \_\_\_\_\_ Seeds have a special coat that keeps them from drying out.



# Plants Make New Plants

Fill in the blanks. Use the words from the box.

flowers

life cycle

seed coat

seeds

fruit

pollen

seedling

Plants make new plants during their life cycle. A

\_\_\_\_\_ shows how a living thing grows, lives, and dies. The life cycle of a plant begins with

a seed. A special covering called a \_\_\_\_\_

helps protect the seed. The seed sprouts a \_\_\_\_\_

if it gets enough food, water, and heat. It may grow

\_\_\_\_\_ as it becomes an adult plant.

A sticky material called \_\_\_\_\_ is found inside flowers. Flowers use pollen to make seeds.

Part of the flower can also grow into a fruit that has

\_\_\_\_\_. When the \_\_\_\_\_

becomes ripe, it falls to the ground. Then the seeds can turn into new plants.

# Animals Grow and Change

Use your book to help you fill in the blanks.

## What is a life cycle?

1. A \_\_\_\_\_ tells how an animal begins life, lives, and dies.
2. Birds' young hatch from \_\_\_\_\_.
3. The life cycle of a \_\_\_\_\_ starts when it is born as a \_\_\_\_\_ baby.

## What are some other animal life cycles?

4. Some \_\_\_\_\_ do not look like their parents at all when they are young.
5. Animals such as butterflies and \_\_\_\_\_ change during their lives.
6. A caterpillar is the \_\_\_\_\_ that hatches from a butterfly egg.
7. A caterpillar enters the \_\_\_\_\_ stage when it is time to turn into a butterfly.
8. During this stage, the caterpillar's \_\_\_\_\_ becomes a hard shell.

9. Soon, an adult \_\_\_\_\_ comes out of the shell and flies away.

### **Critical Thinking**

10. How does a human change during its life cycle?

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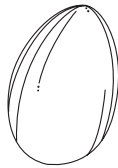
# Animals Grow and Change

Write the correct word next to each stage of this butterfly's life cycle.

butterfly  
egg

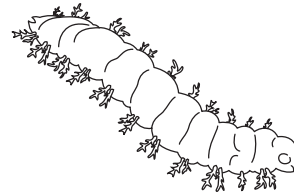
larva  
pupa

1.



This animal begins as  
an \_\_\_\_\_.

2.



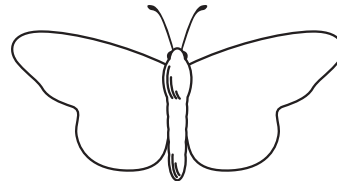
When it hatches, a  
\_\_\_\_\_ comes  
out. This is called a  
caterpillar.

3.



The caterpillar's skin  
becomes a hard shell.  
This is called the  
\_\_\_\_\_ stage.

4.



Soon, an adult  
\_\_\_\_\_ comes  
out of the shell.

# Animals Grow and Change

Fill in the blanks. Use the words from the box.

butterfly

larva

mammals

pupa

egg

life cycle

older

shell

Animals begin their lives in different ways. Each stage of life is a part of a \_\_\_\_\_.

\_\_\_\_\_ begin their lives when they are born as live young. As they grow \_\_\_\_\_, they look more like their parents.

Many insects begin life differently. A \_\_\_\_\_ begins life as an egg. When the \_\_\_\_\_ hatches, a \_\_\_\_\_ comes out. Soon, the larva stops moving and grows a hard \_\_\_\_\_ around its body. This is called the \_\_\_\_\_ stage. Finally, a colorful butterfly comes out. It waits for its wings to dry and then flies away.

# Parents and Offspring

Use your book to help you fill in the blanks.

## How do people grow and change?

1. Humans have \_\_\_\_\_ just like plants and animals.
2. We grow from a baby into a(n) \_\_\_\_\_ in stages.
3. We learn to do more for ourselves at each \_\_\_\_\_ .
4. Reproduction is when parents make more of themselves by producing \_\_\_\_\_ .

## How are parents and offspring alike?

5. Our bodies grow and \_\_\_\_\_ as we get older.

6. All living things pass \_\_\_\_\_ on to their children.
7. Family members sometimes look \_\_\_\_\_.
8. Characteristics called \_\_\_\_\_ set us apart from others.

### Critical Thinking

9. It takes years to grow from a child to an adult.  
Is this a good thing? Explain.

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## Parents and Offspring

Write the correct words for each sentence. Then find and circle the words in the puzzle below.

1. The way children sometimes look like their parents is called \_\_\_\_\_ .
2. We develop \_\_\_\_\_ called \_\_\_\_\_ that make us different from other people.
3. \_\_\_\_\_ make more of themselves by producing \_\_\_\_\_ .

P X M E N O O R R T T U I N G S I M I L A R I T Y

C H A R A C T E R I S R I C S U I Z M T C M D G O

P A R E N T S Q W Y Z O F F S P R I N G L G M W X

W Z I N D O O I Y U X L D I F F E R E N C E S X M



## Parents and Offspring

Fill in the blanks. Use the words from the box.

change  
characteristic

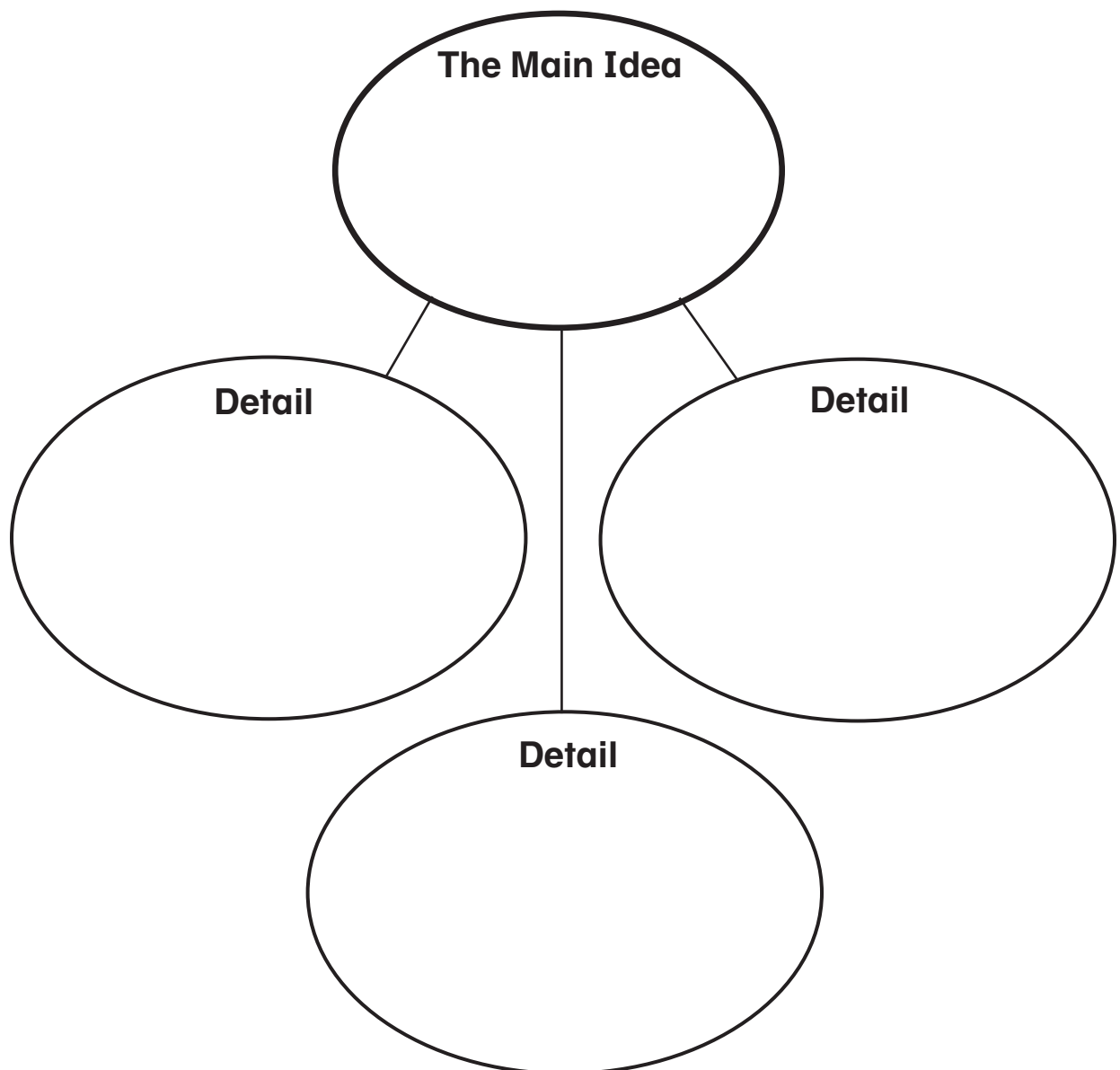
grow  
life cycle

offspring  
similarities

The stages of life are called a(n) \_\_\_\_\_.  
Human offspring start off as a baby. Babies  
\_\_\_\_\_ into adults. Our bodies  
\_\_\_\_\_ as we get older. We learn to do more  
for ourselves at each stage.  
Reproduction is when parents produce  
\_\_\_\_\_. As they grow, offspring may develop  
\_\_\_\_\_ that make them look like their parents.  
These are called \_\_\_\_\_.

# Meet Nancy Simmons

Read the Reading in Science pages in your book.  
Look for the main idea and details as you read.  
Remember, the main idea is the most important  
idea in the passage. Write the main idea in the chart  
below. Be sure to also write any details that help give  
more information about the main idea.



1. What did you learn about the false vampire bat? How did you learn it?

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2. What are baby bats called? What did you learn about how a young bat looks just after it is born?

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### **Write About It**

**Find the Main Idea.** How is a pup different from an adult bat? Use the chart you made to help you write your answer.

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# How Living Things Grow

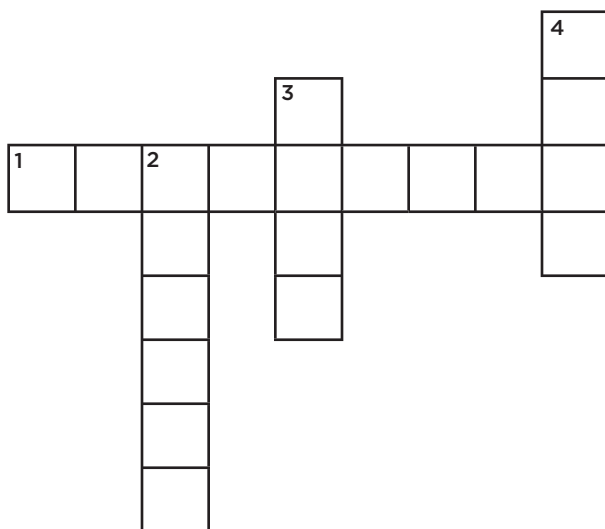
Fill in the blanks. Write the words in the puzzle.

## Across

1. When living things \_\_\_\_\_, they make more of their own kind.

## Down

2. The sticky powder inside a flower is called \_\_\_\_\_.
3. The seed \_\_\_\_\_ protects the seed.
4. A \_\_\_\_\_ is the part of a plant that can grow into a new plant.



Fill in the blanks. Use the words in the box.

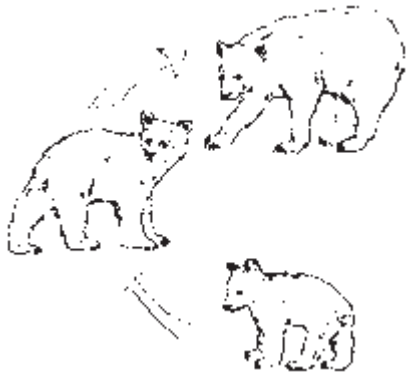
flower

life cycle

larva

seed

1.



A \_\_\_\_\_ shows  
how a living thing lives,  
grows, and dies.

2.



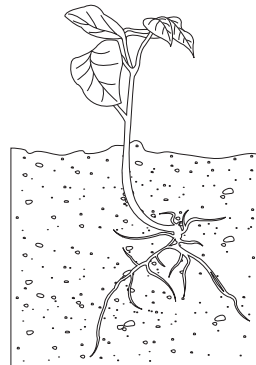
This \_\_\_\_\_ is a  
plant part that can make  
seeds.

3.



A caterpillar is the  
\_\_\_\_\_ of  
a butterfly.

4.



When you plant a  
\_\_\_\_\_ in the  
ground, it can grow into a  
new plant.

# Animals in Their Habitats

Fill in the important ideas as you read the chapter.  
Use the words in the box. You will use one of the words two times.

animal

forest

people

cave

lake

plants

drought

organism

pond

Where do animals  
live?

What is in  
a habitat?

What Are  
Habitats?

Why do  
habitats change?

# Animals on Land

Use your book to help you fill in the blanks.

**How do living things survive in land habitats?**

1. A living thing is also called a(n)  
\_\_\_\_\_.
2. Living things have characteristics called  
\_\_\_\_\_ that help them survive.
3. A \_\_\_\_\_ is an underground land habitat.
4. Cave animals have adaptations to find food in the  
\_\_\_\_\_.
5. Animals can \_\_\_\_\_ in a woodland forest in many ways.
6. An \_\_\_\_\_ is a special body part that can help insects search for food in the dark.
7. Owls have large eyes that help them  
\_\_\_\_\_ in the dark.

**How do living things survive in a cave?**

8. Another kind of land habitat in Tennessee is a \_\_\_\_\_.
9. A cave is an \_\_\_\_\_ land habitat.
10. Caves are sometimes very \_\_\_\_\_ because there is not a way for sunlight to get inside.
11. Some cave animals can \_\_\_\_\_ something moving near them.
12. A(n) \_\_\_\_\_ is an adaptation some cave animals use to find food.

**Critical Thinking**

13. Why might animals that live in a cave not be able to see well?

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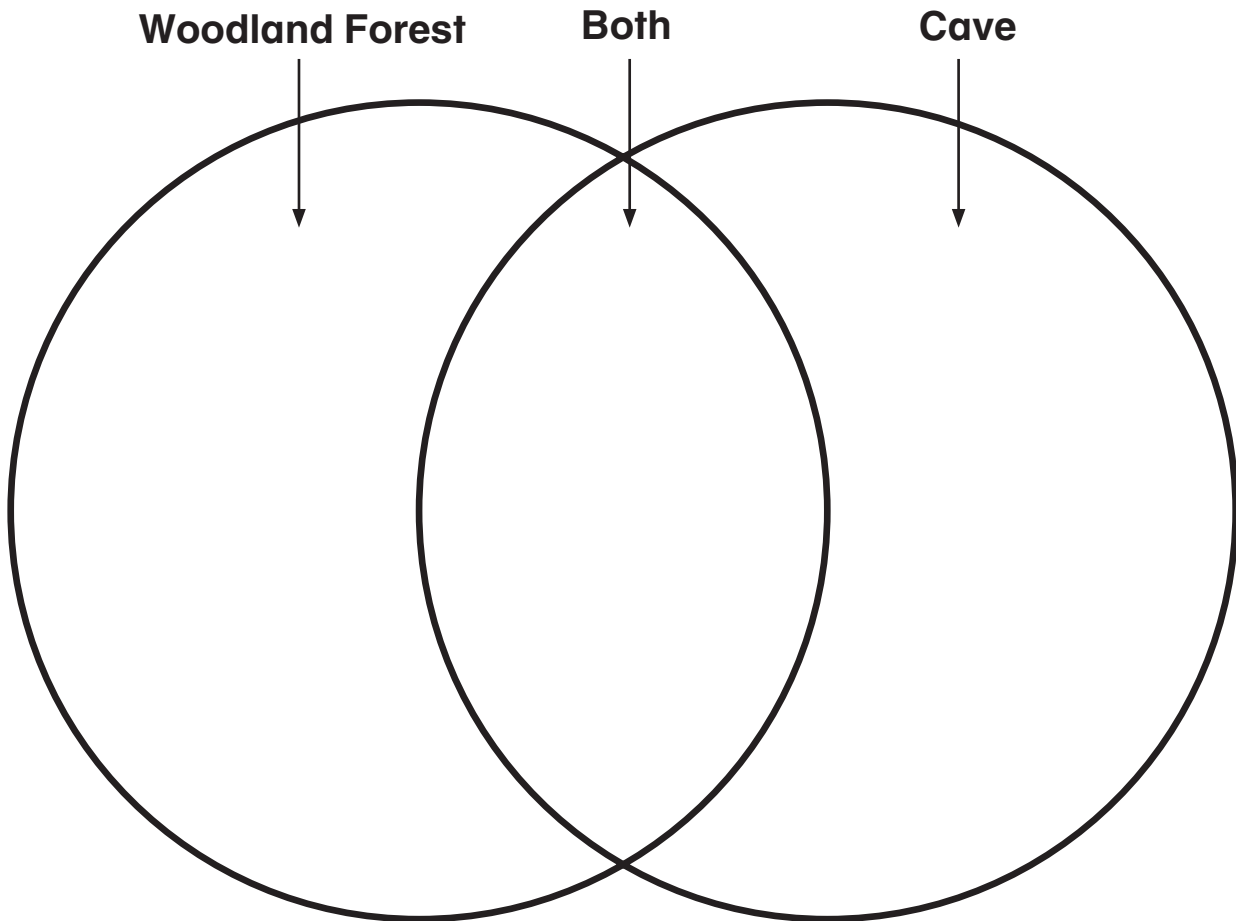
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## Animals on Land

How do woodland forests and caves compare?

Fill in the Venn diagram.



## Animals on Land

Fill in the blanks. Use the words from the box.

adaptation

dark

organism

antennas

forest

survive

A(n) \_\_\_\_\_ is a living thing. All living things have \_\_\_\_\_ that help them get what they need in their habitat.

A woodland \_\_\_\_\_ is one kind of a land habitat. It has many trees. Plants and animals \_\_\_\_\_ in this kind of forest in many ways. Some animals use the trees as their homes. Others sleep in caves during the winter to survive.

A cave is an underground land habitat. Caves are sometimes very \_\_\_\_\_ because there is no way for sunlight to get inside. Some cave animals have \_\_\_\_\_ to help them feel their habitat!

# Meet Liliana Dávalos

Read the Reading in Science pages in your book.  
As you read, think about how Liliana compares and contrasts things in her work as a biologist at the American Museum of Natural History. Remember, when you compare things, you decide how they are alike. To contrast is to decide how things are different.

Answer the questions and fill in the chart below.

1. What other habitats have you learned about in this lesson?

\_\_\_\_\_

2. How is the rain forest alike and different from other kinds of forests?

Rain Forest	Regular Forest	Both

**Write About It**

1. Compare and Contrast. How would life change for the manakins if the Amazon rain forest were cut down? Would it be the same as it is today? Explain.

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2. A biologist is a scientist who studies living creatures. What other kinds of scientists have you learned about? How are they alike and different?

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3. Biologists, like Liliانا, often compare and contrast animals in their work. Why?

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# Animals in Water

Use your book to help you fill in the blanks.

## How do living things survive in moving water?

1. Streams and rivers are \_\_\_\_\_ water habitats.
2. Plants that live in moving water have strong \_\_\_\_\_ to hold them in place.
3. Animals like oysters and crayfish have body parts to help them \_\_\_\_\_ on to rocks.
4. Animals must be able to \_\_\_\_\_ well or be able to hold on to plants and rocks.

## How do living things survive in ponds and lakes?

5. Ponds and lakes have \_\_\_\_\_ water.
6. Plants in ponds and lakes have parts above and \_\_\_\_\_ the water.
7. Fish can jump or swim to catch \_\_\_\_\_.
8. Frogs, fish, and \_\_\_\_\_ are some animals that live in or near ponds.

Name \_\_\_\_\_ Date \_\_\_\_\_

9. Animals that live in water \_\_\_\_\_ in different ways.

10. Animals like \_\_\_\_\_ and \_\_\_\_\_ live near the shore.

### **Critical Thinking**

11. Do you think that the same types of animals live in both rivers and ponds?

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# Animals in Water

Fill in the missing words to complete each sentence.  
Use the words from the box.

adaptations

insects

roots

gills

rivers

stems

1. Streams and \_\_\_\_\_ are moving bodies of water.
2. Animals that live in water have special \_\_\_\_\_ to help them move.
3. Fish breathe through \_\_\_\_\_ .
4. Plants that live in rivers must have strong \_\_\_\_\_ to hold them in place.
5. Some \_\_\_\_\_ use tubes they stick above the water to get air.
6. Water plants have stiff \_\_\_\_\_ to hold leaves and flowers above the water.

## Animals in Water

Fill in the blanks. Use the words from the box.

adaptation

pond

streams

fresh

rivers

surface

The water in Tennessee is home to many animals. Animals that live in water have special ways of getting oxygen. Plants that live in water grow close to the \_\_\_\_\_ so they can get light from the Sun.

\_\_\_\_\_ and \_\_\_\_\_ are moving water habitats. Plants and animals that live in a water habitat have \_\_\_\_\_ to help them move. Plants that live here must have strong roots to hold them in place. Animals must be able to swim well or hold on to plants and rocks.

A pond is a small body of \_\_\_\_\_ water that does not flow.

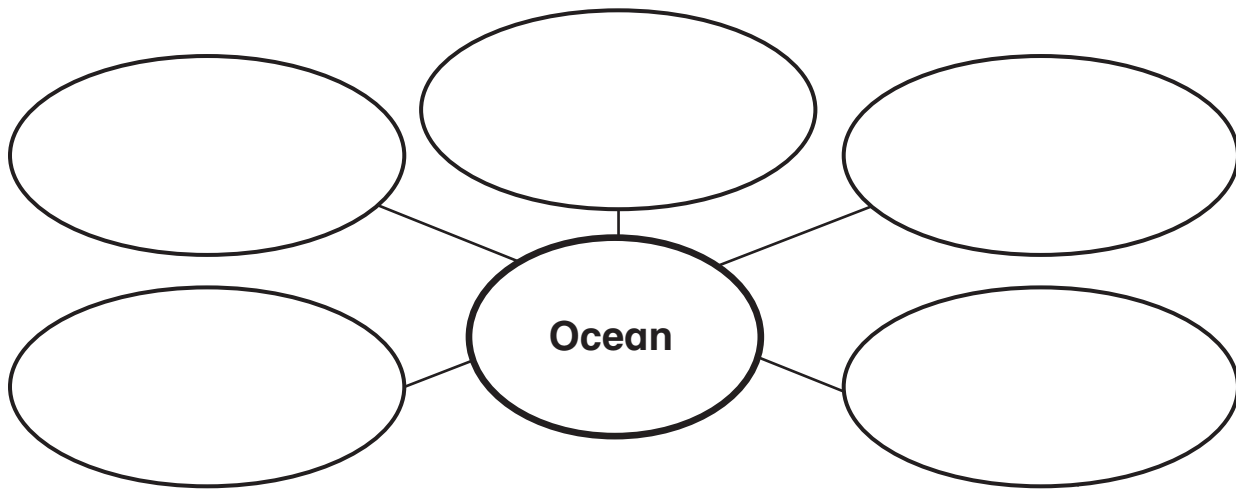


# A Visit to the Ocean

Write a story about a trip you might take to the ocean. How would you get there? Who would you go with? Describe in your story what you would see, hear, and do. Write how it might feel to be there.

## Getting Ideas

Picture yourself standing on a beach next to the ocean. Write what you see and hear.



## Planning and Organizing

Jackson wrote three sentences. They describe what he saw, heard, and did at the ocean. Circle the descriptive words he used.

1. The gigantic ocean waves roared loudly.
2. I saw white gulls sitting on a big rock near the shore.
3. I found a piece of green sea glass and two pretty pink shells.

**Drafting**

**Write a sentence to begin your story. Use I to tell about yourself. Tell where you went and when.**

---

**Now write a story on a separate piece of paper. Put the events in time order. Describe what you saw, heard, and did at the beach.**

**Revising and Proofreading**

**Olivia wrote some sentences and made five mistakes. Find the mistakes and correct them.**

Yesterday, I went to the beech with my family. We saw a huge fish jump threw the waves. I looked for shells. I found a beautiful blue peice of sea glass. Then I fell asleap on my beach towel. When I wake up, it was almost time to go home.

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I tell how I got to the ocean and with whom I went?
- ▶ Did I describe what I saw, heard, and did?
- ▶ Did I correct all mistakes?

# Habitats Change

Use your book to help you fill in the blanks.

## How do habitats change?

1. Habitats \_\_\_\_\_ in many different ways.
2. Fires and floods are natural events that change \_\_\_\_\_.
3. A drought is a slow change that takes place when an area gets little or no \_\_\_\_\_ for a long time.
4. Animals and \_\_\_\_\_ can change habitats.

## What happens when habitats change?

5. When habitats change, the \_\_\_\_\_ and animals that live there may not be able to find the things they need.
6. Some plants and animals may not be able to \_\_\_\_\_ and can become endangered.
7. An animal becomes \_\_\_\_\_ when many of its same kind die.

8. When an animal becomes \_\_\_\_\_,  
there are no more of its kind left in the world.

### **How can we learn about Earth's past?**

9. Scientists study \_\_\_\_\_ to learn what  
Earth was like long ago.
10. Fossils can tell scientists how \_\_\_\_\_,  
plants, and animals have changed over time.
11. Some fossils do not \_\_\_\_\_ the habitat  
where they are found.
12. That tells scientists that there has been a \_\_\_\_\_  
in the habitat.

### **Critical Thinking**

13. Scientists have found fossils with fins and tails  
in dry areas. What do you think these places  
might have looked like long ago? How did they  
change?

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# Habitats Change

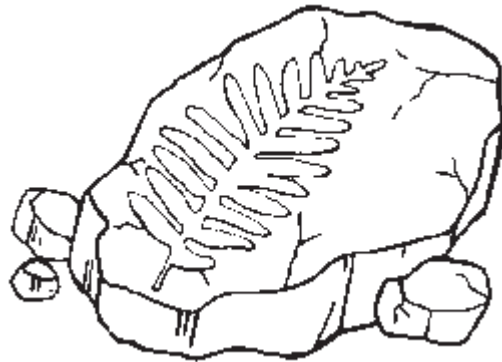
Use the picture to answer the questions. Use the words in the box in your sentences.

drought

endangered

extinct

fossil



1. This fossil was found in a desert. A desert is a very dry place. How do you think this habitat has changed over time?

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2. How do you think this habitat became a desert?

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# Habitats Change

Fill in the blanks. Use the words from the box.

change

endangered

fossil

people

drought

extinct

habitat

Plants and animals live in different places. A

\_\_\_\_\_ is a place where plants and animals live. People also live in habitats. Habitats can \_\_\_\_\_ over time. A \_\_\_\_\_ changes a habitat when an area gets little or no rain for a long time. Habitats can change because of \_\_\_\_\_, too. People destroy plant and animal homes by building roads and buildings.

When habitats change, plants and animals may die. A plant or animal becomes \_\_\_\_\_ when there are only a few of its kind left in the world.

A plant or animal becomes \_\_\_\_\_ when there are no more of its kind left. When plants or animals disappear, they may leave a \_\_\_\_\_ behind. Scientists study fossils to learn what Earth was like long ago.

# Meet Mike Novacek

Read the Reading in Science pages in your book.

As you read, think about how Mike and his team classify and categorize the fossils they discover.

Mike has collected fossils of reptiles, mammals, and dinosaurs.

Use the chart below to classify the animals you have learned about. Remember, when you classify and categorize, you compare things. Then you put the ones that are alike into groups.

**Fossils**

Reptile	Mammal	Dinosaur

I. Where did you put the fossil of the Kryptobaatar skull in the chart?

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**Write About It**

1. Classify and categorize. How can you put fossils into groups?

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2. Why do you think scientists travel around the world looking for fossils?

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3. What do you think a Kryptobaatar looked like?  
Draw a picture.



# Animals in Their Habitats

Fill in the blanks. Use the words in the box.

drought  
extinct

habitat  
river

organism  
prehistoric

1. A(n) \_\_\_\_\_ can happen when there is very little rain.
2. A place where plants and animals live is called a(n) \_\_\_\_\_.
3. A(n) \_\_\_\_\_ is a body of water that flows.
4. A(n) \_\_\_\_\_ is any living thing.
5. Types of animals or plants that are no longer alive are \_\_\_\_\_.
6. A living thing that existed before written history is \_\_\_\_\_.

# Animals in Their Habitats

Fill in the blanks. Use the words in the box.

adaptations

dinosaur

fossil

underground

dark

endangered

moving

1. A cave is an \_\_\_\_\_ chamber.
2. Caves are sometimes very \_\_\_\_\_ because there is not a way for sunlight to get inside.
3. Streams and rivers are \_\_\_\_\_ water habitats.
4. Fish have \_\_\_\_\_ that help them to breathe.
5. A prehistoric animal we learn about from fossils is called a(n) \_\_\_\_\_.
6. An animal becomes \_\_\_\_\_ when there are only a few of its kind left on Earth.
7. A \_\_\_\_\_ is what is left of a living thing that lived long, long ago.

# The Seed

by Aileen Fisher

**Read the Unit Literature pages in your book.**



## Write About It

### Response to Literature

1. What do you think seeds need to grow?

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2. Where have you seen seeds? Draw a picture.

A large, empty rectangular box with a black border, intended for a student to draw a picture of where they have seen seeds.

# Earth and Space

Fill in the important ideas as you read the chapter.  
Use the words in the box.

axis

orbit

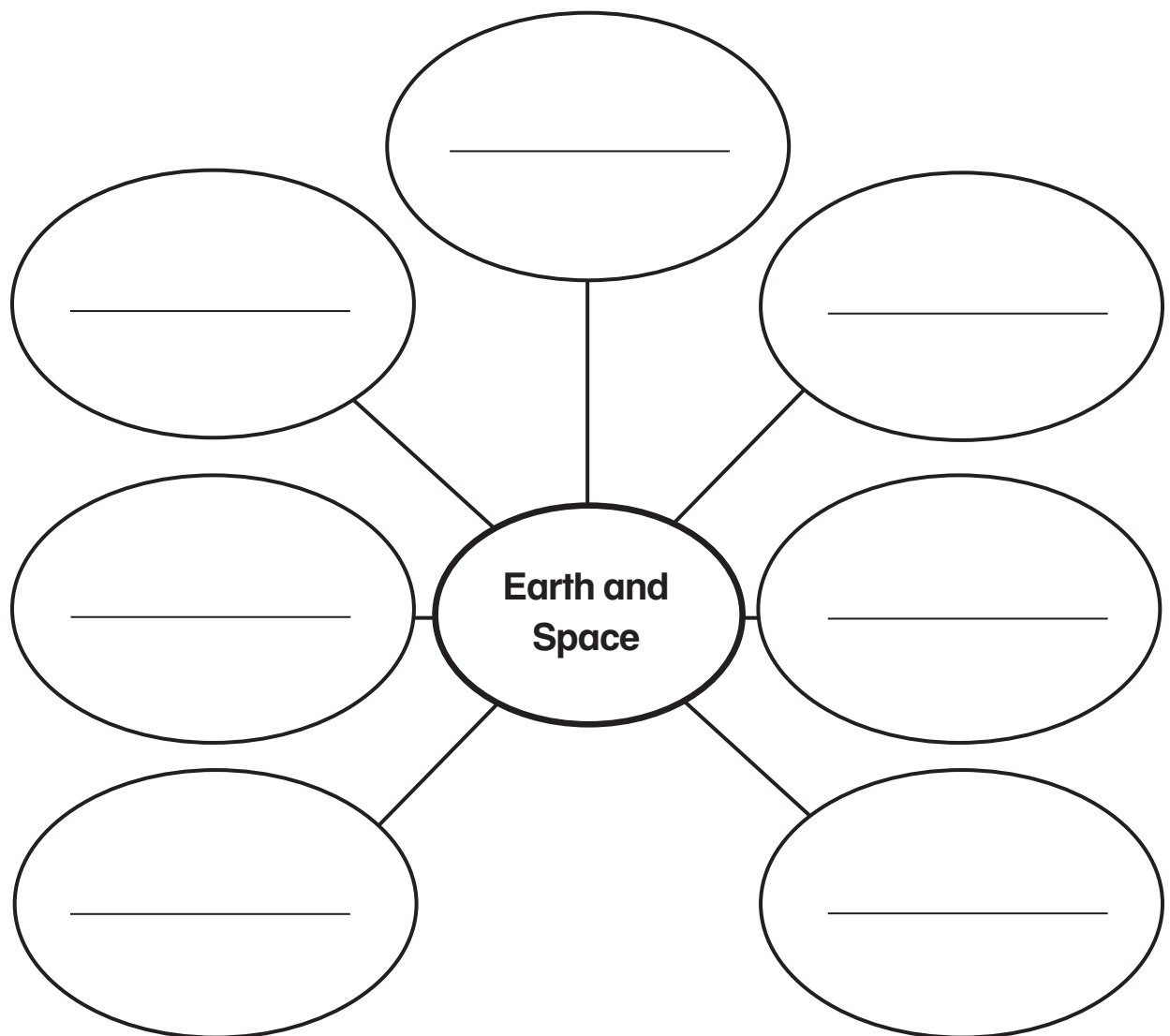
planet

star

Moon

phase

rotation



# The Sun and Earth

Use your book to help you fill in the blanks.

## What causes day and night?

1. Earth's \_\_\_\_\_ is what causes day and night.
2. It is \_\_\_\_\_ when our side of Earth faces the Sun.
3. When our side of Earth faces the Sun, it is \_\_\_\_\_ on the other side.
4. Earth always \_\_\_\_\_ in the same direction.
5. It takes 24 hours for Earth to make one full turn on its \_\_\_\_\_.

## Why does the Sun seem to move in the sky?

6. The \_\_\_\_\_ seems to move across the sky during the day.
7. Shadows on the ground change as Earth \_\_\_\_\_.

## What causes the seasons?

8. Earth moves in an \_\_\_\_\_ around the Sun.
9. Earth 's \_\_\_\_\_ is tilted.
10. As Earth moves around the Sun, the tilt of Earth causes the \_\_\_\_\_ .

## Critical Thinking

11. What happens on the other side of Earth when it is night where you live? How do you know?

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# The Sun and Earth

Fill in the blanks. Use the words from the box.

axis	night	Sun's position
Day	rotation	orbit

1. \_\_\_\_\_ and night are caused by Earth's rotation.
2. Earth's \_\_\_\_\_ never changes direction.
3. Every 24 hours, Earth rotates once on its \_\_\_\_\_ .
4. When it is day where you live, it is \_\_\_\_\_ on the other side of the world.
5. The length of a shadow depends on the \_\_\_\_\_ in the sky.
6. Each year the Earth makes one \_\_\_\_\_ around the Sun.

# The Sun and Earth

Fill in the blanks. Use the words from the box.

axis

Earth

rotation

Sun

day

night

shadows

You can not feel it, but you are spinning right now. In fact, \_\_\_\_\_ is always spinning. It spins all \_\_\_\_\_ and all night. It even spins when you are asleep! This turning is called Earth's \_\_\_\_\_. It is why we have day and \_\_\_\_\_.

Every 24 hours, Earth rotates one time on its \_\_\_\_\_. As it rotates, light from the \_\_\_\_\_ lights a different part of the planet. This is why \_\_\_\_\_ are longer during the day. When it is day on one side of the world, it is night on the other side.



# The Moon and Stars

Use your book to help you fill in the blanks.

**What is the Moon like?**

1. The Moon does not shine like the \_\_\_\_\_.
2. We see the Moon because \_\_\_\_\_ from the Sun shines on it.
3. The Moon is made of \_\_\_\_\_.
4. It has no \_\_\_\_\_ things.
5. It takes the Moon about one \_\_\_\_\_ to orbit Earth.

**Why does the Moon seem to change shape?**

6. From Earth the Moon looks as if it is \_\_\_\_\_ shape.
7. The Moon does not really change shape. Our view of the Moon changes as the Moon moves around its \_\_\_\_\_.

8. The different shapes we see during the month  
are called \_\_\_\_\_ of the Moon.

### **What are stars?**

9. Stars are space objects made of hot \_\_\_\_\_ .
10. Stars can have different \_\_\_\_\_ and  
sizes.
11. Some stars make \_\_\_\_\_ in the sky.
12. The Sun is a \_\_\_\_\_ that gives light  
and heat to Earth.

### **Critical Thinking**

13. Why can we see both the Moon and stars in the  
night sky?

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# The Moon and Stars

Complete each word.

1. The \_\_\_\_ o \_\_\_\_ n does not give off its own light.
2. The different shapes of the Moon are called \_\_\_\_ h \_\_\_\_ e \_\_\_\_ .
3. It takes the Moon one month to go around \_\_\_\_ a \_\_\_\_ h \_\_\_\_ once.
4. Stars look like tiny points of \_\_\_\_ \_\_\_\_ g \_\_\_\_ \_\_\_\_ because they are so far away.
5. The Sun is the closest \_\_\_\_ t \_\_\_\_ a \_\_\_\_ to Earth.

# The Moon and Stars

Fill in the blanks. Use the words from the box.

gases

Moon's

phases

Sun

light

patterns

stars

The Moon does not shine the way the Sun does. We see the Moon because \_\_\_\_\_ from the Sun shines on the Moon. Even though it looks different sometimes, the \_\_\_\_\_ shape does not really change. The shapes of the Moon we see each month are called \_\_\_\_\_.

A star is an object in space made of hot \_\_\_\_\_. The \_\_\_\_\_ is the closest star to Earth. That is why it looks so large. From Earth, other \_\_\_\_\_ look like tiny points of light. Some stars make \_\_\_\_\_ in the sky. Can you name any star patterns?

# Earth and Space

Solve each riddle. Use the words in the box.

orbit

stars

rotation

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

These great big balls  
of hot glowing gases  
can be seen at night.

2. \_\_\_\_\_

Round and round,  
Earth and the Moon  
go, on a trip that  
makes the seasons  
switch!

3. \_\_\_\_\_

It makes daytime  
here, and nighttime  
there, every 24 hours,  
every day, every year.

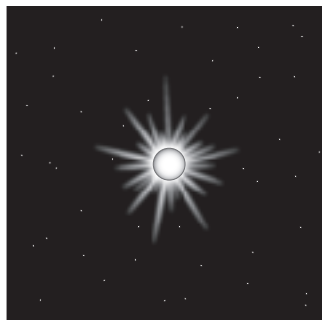
**Label each picture. Use the words in the box.**

axis

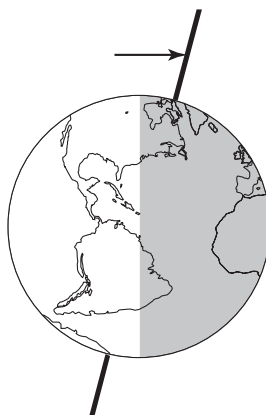
moon phases

Sun

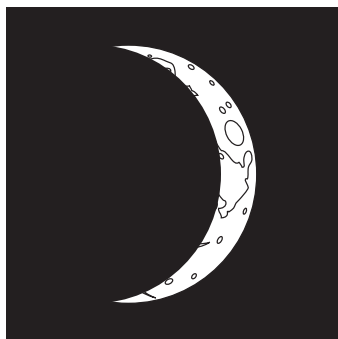
1. \_\_\_\_\_



2. \_\_\_\_\_



3. \_\_\_\_\_



# Earth's Resources

Fill in the important ideas as you read the chapter.  
Write at least one way we use each of the natural resources shown on the left. Then, answer the question.

**How do we use Earth's resources?**

Rocks	→	
Minerals	→	
Soil	→	
Water	→	
Wind	→	
Oil	→	

**Why should we care for Earth's resources?**

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# Rocks and Minerals

Use your book to help you fill in the blanks.

## What are rocks?

1. We use \_\_\_\_\_ like plants, animals, water, and rocks every day.
2. Unlike plants and animals, rocks are \_\_\_\_\_ resources.
3. Rocks can have different \_\_\_\_\_ and shapes.
4. Rocks cover the \_\_\_\_\_ of Earth.
5. People have used rocks as \_\_\_\_\_ for thousands of years.
6. People can also use rocks to carve \_\_\_\_\_ or build things.



## What are minerals?

7. Most \_\_\_\_\_ are made of one or more minerals.
8. A \_\_\_\_\_ is a nonliving thing that comes from Earth.
9. It takes \_\_\_\_\_ of years for rocks and minerals to form inside Earth.
10. People \_\_\_\_\_ to find rocks and minerals.
11. People use minerals like \_\_\_\_\_ to help make toothpaste. They use other minerals to make other things.

## Critical Thinking

12. Why are rocks and minerals Earth resources?

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# Rocks and Minerals

Fill in the blanks. Then find the vocabulary words in the puzzle.

1. A \_\_\_\_\_ is a hard, nonliving part of Earth.
2. A rock can be made of one \_\_\_\_\_ or made of many different kinds.
3. An \_\_\_\_\_ resource is something from nature that people use.
4. People can make \_\_\_\_\_ out of rocks.
5. The mineral \_\_\_\_\_ can be found in a pencil.

K	A	T	U	R	E	P	S	T	T
R	Q	R	T	K	A	S	L	F	O
O	M	I	N	E	R	A	L	U	O
C	F	E	A	R	T	H	M	S	L
K	G	R	A	P	H	I	T	E	S

# Rocks and Minerals

Fill in the blanks. Use the words from the box.

Earth resource

minerals

tools

graphite

statues

magnetite

surface

Rocks are the most common materials on Earth.

They cover the \_\_\_\_\_ of Earth, from the top of a mountain to the bottom of the ocean. Rocks and \_\_\_\_\_ are nonliving things that make up part of Earth's surface.

Rocks and minerals are natural resources. An \_\_\_\_\_ is something from nature, such as water, wood, or minerals, that people use in everyday life. The mineral \_\_\_\_\_ is found in magnets, and \_\_\_\_\_ is found in pencils.

For thousands of years, people have made \_\_\_\_\_ from rocks. They have even made \_\_\_\_\_ from rocks. The Sphinx in Egypt was carved from rock thousands of years ago.

# Soil

Use your book to help you fill in the blanks.

## What is soil?

1. Earth's \_\_\_\_\_ is made of a mix of sand, clay, rocks, and minerals.
2. Parts of \_\_\_\_\_ and animals that have died are in soil, too.
3. Clay soil, topsoil, and \_\_\_\_\_ are found in different places and have different colors.
4. Each kind of soil feels different and has a different \_\_\_\_\_ .
5. Some soils feel like \_\_\_\_\_ or pebbles.
6. Other soils feel \_\_\_\_\_ and are light in color.
7. Some soils hold more \_\_\_\_\_ than others.
8. The soils that hold more water have a \_\_\_\_\_ color.

## How is soil formed?

9. It can take a very long time for rocks and \_\_\_\_\_ to break down into soil.
10. When plants and animals die, their parts \_\_\_\_\_ and rot away.
11. The \_\_\_\_\_ that were once inside living things make the soil healthy for plants.
12. Plants grow best in \_\_\_\_\_.
13. Topsoil is the \_\_\_\_\_ of soil with decaying plant and animal parts.
14. A mix of soil and parts of rotting plants and animals is called a \_\_\_\_\_ pile.

## Critical Thinking

15. Why is soil important?

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# Soil

Match each word in the box to the correct picture and use the word in a sentence.

compost

decompose

topsoil

1.



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2.

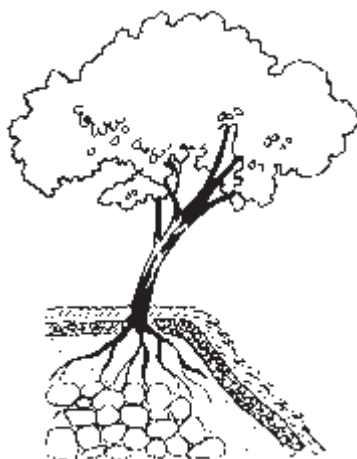


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3.



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# Soil

Fill in the blanks. Use the words from the box.

decompose  
Earth resources

layer  
nutrients

rocks  
texture

Soil can be found almost everywhere on land.

Soil is one of the most important \_\_\_\_\_ .

Soil is formed when \_\_\_\_\_ and minerals  
break down into smaller pieces over many years.

Parts of dead plants and animals \_\_\_\_\_  
and become part of the soil, too. The \_\_\_\_\_  
inside these once-living things help make the  
soil healthy.

Plants grow best in the top \_\_\_\_\_ of  
soil, called topsoil. This is where the soil is richest  
with nutrients. Some soils are light, and others are dark.

Each soil feels different and has a different \_\_\_\_\_.  
Some soils hold a lot of water, while others are sandy  
and do not hold much water. However, all soils are  
important to Earth.

# Using Earth's Resources

Use your book to help you fill in the blanks.

## How do we use natural resources?

1. People use air, wind, water, rocks, and soil as \_\_\_\_\_ every day.
2. Earth can quickly \_\_\_\_\_ resources such as water and wind.
3. Other resources, such as \_\_\_\_\_, can not be made quickly by Earth.

## Why should we care for Earth resources?

4. It is important to care for Earth's \_\_\_\_\_, water, and air.
5. Pollution can harm \_\_\_\_\_ things such as plants, animals, and people.
6. Pollution makes Earth's air, \_\_\_\_\_, and land dirty.
7. To stop land pollution, people can clean up the \_\_\_\_\_ they leave behind.



## How can we save Earth's resources?

8. People can help to \_\_\_\_\_ Earth resources.
9. Remember the \_\_\_\_\_ Rs: reduce, reuse, and recycle.
10. When people \_\_\_\_\_, they cut back on how much they use a resource.
11. When people \_\_\_\_\_ something, they use it again, often in a new way.
12. When people \_\_\_\_\_ glass, paper, and cans, they make new things out of them and reduce litter.

## Critical Thinking

13. How do you use natural resources every day?

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## Using Earth's Resources

Each picture below shows a way to conserve Earth's natural resources. Write **reduce**, **reuse**, or **recycle** under the correct picture.

1.



\_\_\_\_\_

2.



\_\_\_\_\_

3.



\_\_\_\_\_

4.



\_\_\_\_\_

What are other ways you can help conserve Earth's resources where you live?

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## Using Earth's Resources

Fill in the blanks. Use the words from the box.

conserve

litter

reduce

Earth  
resources

pollution

wind

recycle

Earth needs your help. Every day, you use \_\_\_\_\_  
such as air, water, and land. Resources like water  
and \_\_\_\_\_ are replaced quickly.  
Resources such as minerals take longer to replace.  
It is important to \_\_\_\_\_ Earth resources.

Something that makes air, water, or land dirty  
is called \_\_\_\_\_. Help keep land and  
water clean by picking up \_\_\_\_\_. You  
can protect resources if you \_\_\_\_\_ and  
reuse things. You can \_\_\_\_\_ paper,  
glass, and plastic so they can be made into  
something else. Remembering the 3 Rs is the first  
step to helping save Earth's resources.

# A World of Wool

Read the Reading in Science pages in your book. As you read, pay attention to the most important ideas. List them in the chart below. Then summarize the article. Remember, when you summarize, you retell the most important ideas in the selection.

Idea #1	→	Summary
_____		_____
_____		_____
Idea #2	→	_____
_____		_____
_____		_____
Idea #3	→	_____
_____		_____
_____		_____
_____		_____



## Write About It

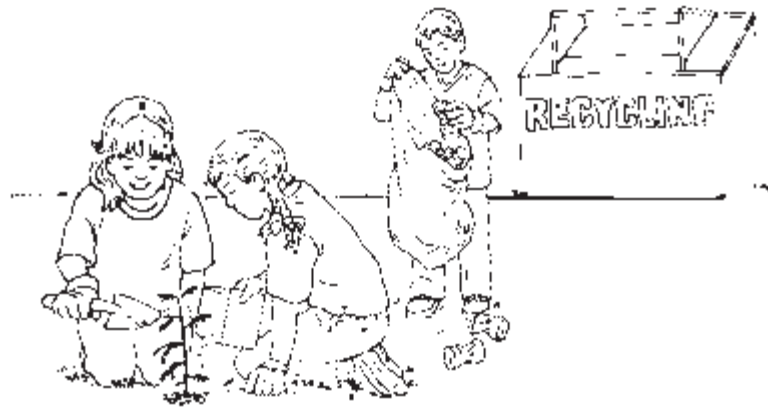
**Summarize.** Write a paragraph that retells what you learned about llama wool. Use the following words in your writing: cold, warm, sweaters, llamas, camels, fur, spin, yarn, clothes, Andes Mountains.

[illegible]

# Earth's Resources

Write a short story about what is happening in the picture. Use at least three words from the box.

conserve	litter	reduce
Earth resources	pollution	reuse
minerals	recycle	



**Title:** \_\_\_\_\_

**Story:** \_\_\_\_\_

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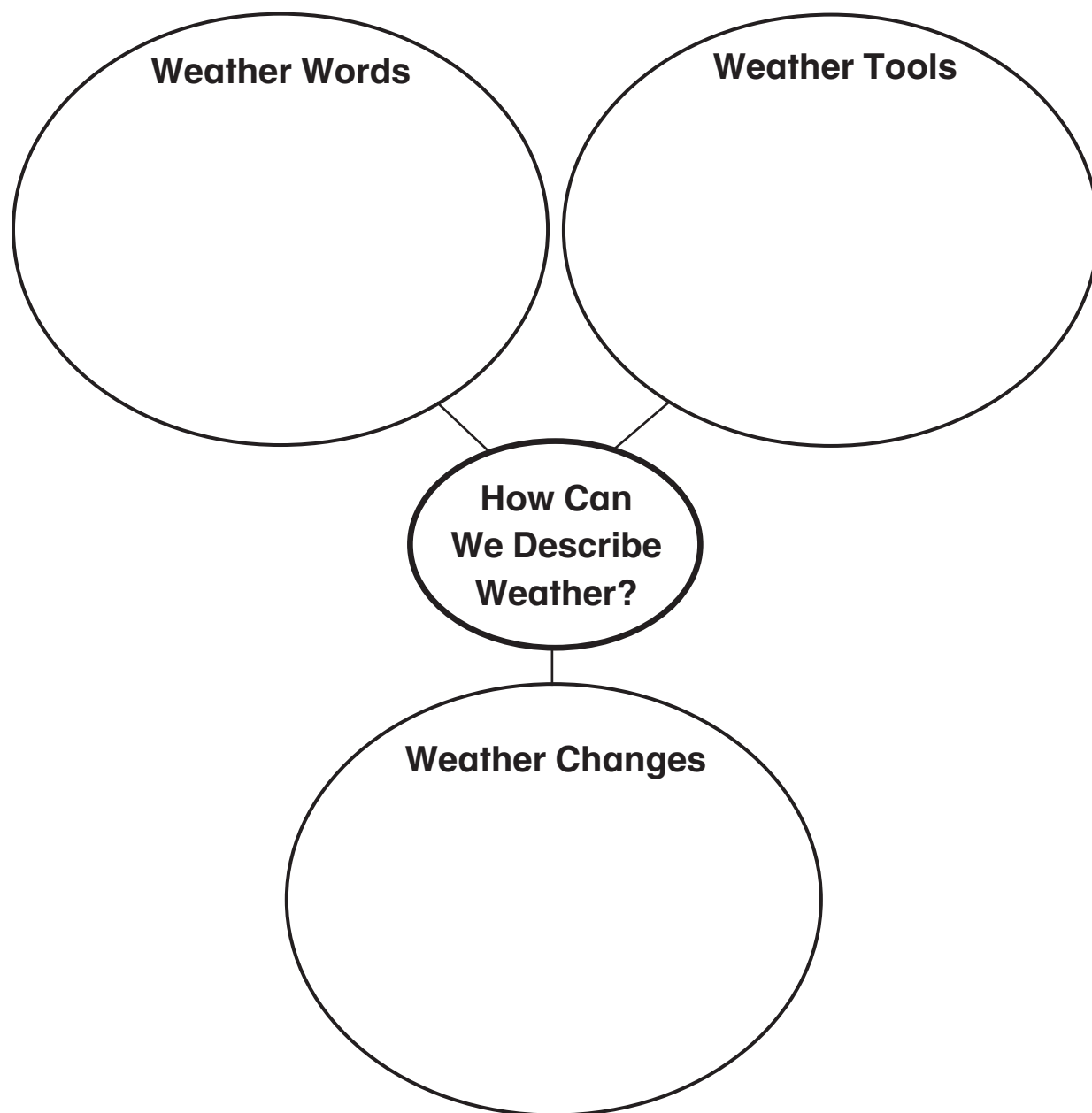
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**If the sentence is true, write TRUE. If the sentence is not true, write FALSE.**

1. \_\_\_\_\_ Rocks are made of minerals.
2. \_\_\_\_\_ Litter is garbage that people leave behind.
3. \_\_\_\_\_ Plastic is a natural resource.
4. \_\_\_\_\_ When dead plants or animals decompose, their parts rot away.
5. \_\_\_\_\_ Soil is made only of rocks.
6. \_\_\_\_\_ A compost is a mix of paper, plastic, and glass.

# Weather Through the Seasons

Fill in the important ideas as you read the chapter.





# Weather

Use your book to help you fill in the blanks.

## What is weather?

1. People think about the \_\_\_\_\_ every day.
2. The \_\_\_\_\_ outside helps people choose what kind of clothes to wear.
3. Temperature is a measure of how \_\_\_\_\_ or cold something is.
4. People use a \_\_\_\_\_ to measure temperature.
5. There are \_\_\_\_\_ ways to describe temperature: in degrees Fahrenheit or degrees Celsius.
6. The \_\_\_\_\_ that falls from the clouds can also be measured.
7. Rain, snow, sleet, and \_\_\_\_\_ are kinds of precipitation.

**What is wind?**

8. The differences between hot and cold air cause air to move, making \_\_\_\_\_.
9. You can use a \_\_\_\_\_ to measure the direction of wind.
10. This tool also shows how \_\_\_\_\_ the wind is blowing.
11. People can use an \_\_\_\_\_ to measure the speed of the wind.

**Critical Thinking**

12. What is wind? What can wind tell you about weather?

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# Weather

Draw a line to match the weather tool with what it measures. Using the word in the list, label each

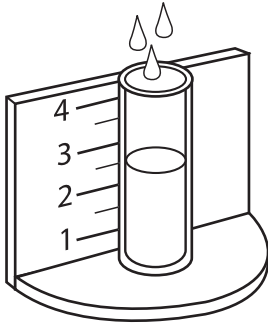
anemometer

rain gauge

thermometer

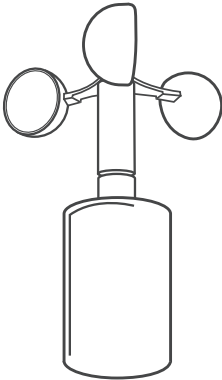
tool.

1.



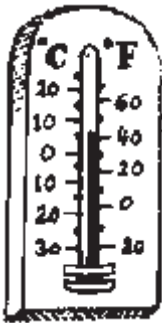
a. temperature

2.



b. wind speed

3.



c. precipitation

# Weather

Fill in the blanks. Use the words from the box.

anemometer

rain gauge

weather

Fahrenheit

temperature

wind

precipitation

thermometer

wind sock

Look out the window. What is the \_\_\_\_\_  
like? Is it sunny? Is it rainy? People use special  
tools to find out about the weather. A \_\_\_\_\_  
is used to find out how hot or cold it is outside.

This tool measures the \_\_\_\_\_ of the  
air. The air is measured in degrees \_\_\_\_\_  
or in degrees Celsius.

Moving air is called \_\_\_\_\_. The  
speed with which the wind blows is measured by  
using an \_\_\_\_\_. A \_\_\_\_\_  
shows what direction the wind is blowing. Rain,  
snow, sleet, and hail are kinds of \_\_\_\_\_.

A \_\_\_\_\_ is used to measure precipitation.  
These tools help people learn about the weather.

# A Snowy Day



## Write About It

Write a story about what you might do on a snowy day.

### Getting Ideas

Picture a snowy day in your mind. Now put yourself in the picture. Write what you are doing.

<b>First</b>
↓
<b>Next</b>
↓
<b>Last</b>

### Planning and Organizing

Put the sentences in time order.

\_\_\_\_\_ We bundled up in warm clothing.

\_\_\_\_\_ We climbed to the top of the hill and slid down.

\_\_\_\_\_ We walked to the big hill in the park.

## Drafting

**Write the first sentence of your story. Tell how you started your snowy day.**

\_\_\_\_\_

**Now write your story on a separate piece of paper. Put the events in time order. Include details.**

## Revising and Proofreading

**Use the words in the box to fill in the blanks.**

cold  
huge

long  
soft

warm

It was a cloudy and \_\_\_\_\_ day. Andy and I wore \_\_\_\_\_ clothes outside. We noticed \_\_\_\_\_, narrow icicles hanging from the trees. They were beautiful! Maple Hill was covered in \_\_\_\_\_, deep snow that made it hard to climb. At the top, we made a \_\_\_\_\_ ball of snow. Then we rolled it down the hill.

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I use details to tell what I might do on a snowy day?
- ▶ Did I correct all mistakes?

# Spring and Summer

Use your book to help you fill in the blanks.

## What happens in spring?

1. A time of year is a \_\_\_\_\_.
2. The four \_\_\_\_\_ are winter, spring, summer, and fall.
3. There are more hours of sunlight in \_\_\_\_\_.
4. The rain and extra \_\_\_\_\_ in spring help plants grow.
5. Many \_\_\_\_\_ are born in spring.

**What happens in summer?**

6. The season after spring is \_\_\_\_\_.
7. Summer is the \_\_\_\_\_ season.
8. Many plants grow \_\_\_\_\_ in summer.
9. During summer, there is more  
\_\_\_\_\_ for animals to eat.

**Critical Thinking**

10. When do most people go to the beach? Why?

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# Spring and Summer

Read the sentences. Write TRUE if the sentence is true. Write NOT TRUE if the sentence is not true.

- \_\_\_\_\_ 1. A **season** is a time of year.
- \_\_\_\_\_ 2. There are three **seasons** of the year.
- \_\_\_\_\_ 3. There are more hours of sunlight in **spring** than in winter.
- \_\_\_\_\_ 4. In **spring**, plants begin to sprout and many animals are born.
- \_\_\_\_\_ 5. **Summer** is the coolest season.
- \_\_\_\_\_ 6. Sunlight in **summer** helps plants grow fruits.

## Spring and Summer

Fill in the blanks. Use the words from the box.

daylight

spring

plants

summer

In many places, the weather changes during the four seasons. The weather begins to warm up in \_\_\_\_\_. There are more hours of \_\_\_\_\_. The rain in spring helps \_\_\_\_\_ grow.

The season with the longest days is \_\_\_\_\_. In this season, people may sit in the shade or go for a swim.

# Museum Mail Call

Read the Reading in Science pages in your book. Fill in the diagram below. Write the important ideas in the small boxes. Then retell these ideas in the big box.

The diagram consists of three small rectangular boxes stacked vertically on the left side. Each of these boxes contains three horizontal lines for writing. Arrows from the right side of each of these three boxes point towards a single, larger rectangular box on the right side. This larger box contains five horizontal lines for writing. The arrows indicate that the information gathered in the small boxes should be used to fill the larger box.



## Write About It

**Find Main Idea and Details.** What happens in spring to help the Hunza farmers' seeds grow? Finish this summary. Use the diagram you made on page 102.

In spring, the \_\_\_\_\_ in the mountains of Pakistan. The Hunza farmers \_\_\_\_\_ to bring this water to their land. This water \_\_\_\_\_ .

# Fall and Winter

Use your book to help you fill in the blanks.

## What happens in fall?

1. The season after summer is \_\_\_\_\_ .
2. There are \_\_\_\_\_ hours of sunlight in fall than in summer.
3. Less sunlight makes the air \_\_\_\_\_ .
4. Some \_\_\_\_\_ change color and fall off trees.
5. In fall, some animals store food or move to \_\_\_\_\_ places.

**What happens in winter?**

6. The coldest season of the year is \_\_\_\_\_ .
7. There are fewer hours of \_\_\_\_\_  
in winter.
8. In winter there is not as much food for  
\_\_\_\_\_ .

**Critical Thinking**

9. Why do you think some animals sleep until  
spring?

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# Fall and Winter

Write the word *fall* or *winter* beside each picture to tell which season it shows.

1.



\_\_\_\_\_

2.



\_\_\_\_\_

3.



\_\_\_\_\_

4.



\_\_\_\_\_

5.



\_\_\_\_\_

# Fall and Winter

Fill in the blanks. Use the words from the box.

food

leaves

sunlight

winter

Fall and winter are the two coolest seasons of the year. In fall, there are fewer hours of \_\_\_\_\_. Some trees lose their \_\_\_\_\_, and many fruits get ripe.

The coldest season of the year is \_\_\_\_\_. There is not enough \_\_\_\_\_ for animals to eat. Some animals go to sleep or leave for warmer places.



# Seasons Change



## Write About It

Write about one of the pictures. Describe the weather. What could you wear and do if you were there?



## Getting Ready

Pick one of the pictures. Imagine yourself there. What would you see, hear, and feel? Write your ideas in the chart.

See	Hear	Feel

## Drafting

**Write your paragraph. Start with the main idea.  
Describe the weather. Use words that tell what you  
see, hear, and feel**

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**Now look at your paragraph.  
Ask yourself:**

- ▶ Did I begin with a main idea?
- ▶ Did I describe the weather?
- ▶ Did I correct all mistakes?

# Weather and Seasons

Circle the words in each box that tell about the word at the top of the box.

<p><b>1. seasons</b></p> <p>fall</p> <p>winter</p> <p>temperature</p> <p>summer</p> <p>spring</p>	<p><b>2. weather tools</b></p> <p>wind sock</p> <p>rain gauge</p> <p>clouds</p> <p>thermometer</p>
<p><b>3. weather</b></p> <p>precipitation</p> <p>wind</p> <p>temperature</p> <p>harvest</p>	<p><b>4. temperature</b></p> <p>cold</p> <p>hot</p> <p>rain gauge</p> <p>thermometer</p>

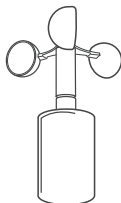
**Draw a line from the picture to the word that tells about the picture.**

1.



anemometer

2.



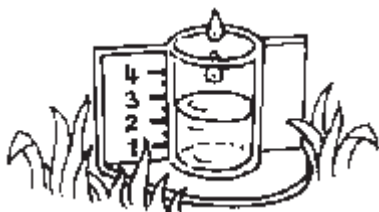
fall

3.



rain gauge

4.



thermometer

5.



winter

# Sunflakes

By Frank Asch

Read the Unit Literature pages in your book.



## Write About It

### Response to Literature

1. What season is the poet writing about? Use the poem to tell how you know.

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2. What are some things that you do in July? How do your activities compare to the poet's?

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3. What do you think a sunflake looks like?  
Draw a picture.

# Looking at Matter

Fill in the important ideas as you read the chapter. Write three facts about the properties of each kind of matter.

Matter is \_\_\_\_\_.

What Are the Properties of Matter?		
Solid	Liquid	Gas
<b>1.</b> _____ _____	<b>1.</b> _____ _____	<b>1.</b> _____ _____
<b>2.</b> _____ _____	<b>2.</b> _____ _____	<b>2.</b> _____ _____
<b>3.</b> _____ _____	<b>3.</b> _____ _____	<b>3.</b> _____ _____

# Describing Matter

Use your book to help you fill in the blanks.

## What is matter?

1. Matter is anything that takes up \_\_\_\_\_ and has mass.
2. Some matter can be \_\_\_\_\_ by people.
3. An object's mass is the amount of \_\_\_\_\_ it has.
4. Objects can be made of \_\_\_\_\_ amounts of matter.
5. A \_\_\_\_\_ is used to measure and compare mass.

## How can you describe matter?

6. Matter can be described by talking about its \_\_\_\_\_.
7. A \_\_\_\_\_ is how matter looks, feels, smells, tastes, or sounds.

8. Different \_\_\_\_\_ of matter have different properties.
9. Matter can be \_\_\_\_\_ or nonliving.
10. There are \_\_\_\_\_ main kinds of matter: solids, liquids, and gases.

### **Critical Thinking**

11. What are some ways that matter can be described? What do these ways tell you about matter?

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# Describing Matter

What is the secret answer? Fill in the missing words and then fill in the answer by using the circled letters.

1. Matter can be \_\_\_\_  \_\_\_\_ or thin.
2. Anything that takes up space and has mass is called \_\_\_\_  \_\_\_\_.
3. Matter can be a \_\_\_\_  \_\_\_\_, a liquid, or a gas.
4. Matter can be natural or made by \_\_\_\_  \_\_\_\_.
5. The amount of matter in an object is called \_\_\_\_  \_\_\_\_.
6. A \_\_\_\_  \_\_\_\_ describes how matter looks, feels, smells, tastes, or sounds.

Q: What did the doctor say to the scientist?

A: W \_\_\_\_ a \_\_\_\_ s t h \_\_\_\_ m \_\_\_\_ t e r?



## Describing Matter

Fill in the blanks. Use the words from the box.

balance	feel	gas	matter	smaller
describe	flexible	mass	property	

Matter is everywhere. Matter can be a solid, a liquid, or a \_\_\_\_\_. Anything that takes up space and has \_\_\_\_\_ is matter. The amount of \_\_\_\_\_ in an object is called mass.

A \_\_\_\_\_ can be used to measure and compare the mass of objects. Sometimes, a \_\_\_\_\_ object has more mass than a larger object.

It is possible to \_\_\_\_\_ matter by talking about its properties. A \_\_\_\_\_ is a way matter looks, feels, smells, tastes, or sounds. Matter can be soft or it can be hard. Matter can be \_\_\_\_\_ or stiff. It can also \_\_\_\_\_ rough, smooth, or wet. Some matter is even invisible!

# Solids

Use your book to help you fill in the blanks.

## What is a solid?

1. A \_\_\_\_\_ is one of three kinds of matter.
2. Solids have a \_\_\_\_\_ of their own.
3. Like all matter, different solids have \_\_\_\_\_ properties.
4. Solids can be made from \_\_\_\_\_ like wood, plastic, and metal.
5. They can feel smooth, rough, soft, or hard when you \_\_\_\_\_ them.

## How can we measure solids?

6. Many \_\_\_\_\_ can be used to measure solids.
7. A \_\_\_\_\_ can be used to measure the width, the length, or the height of an object.

8. Rulers can be used to measure the lengths of objects in \_\_\_\_\_ or inches.
9. A \_\_\_\_\_ is used to tell how much mass something has.
10. To tell the difference between two objects, their measurements can be \_\_\_\_\_.

### Critical Thinking

11. What will happen to a balance if you put a brick on one side and a feather on the other? Why?

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# Solids

Circle the best answer.

1. Which solid is longer?



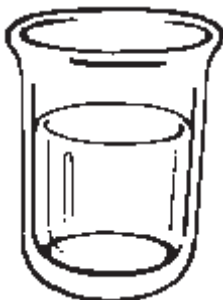
2. Which solid has less mass?



3. Which is softer?



4. Which is smoother?



# Solids

Fill in the blanks. Use the words from the box.

balance	inches	materials	properties	sink
centimeters	mass	measure	rough	

A solid is a kind of matter that has its own shape. Like all matter, different solids can be made of different \_\_\_\_\_. Solids get their \_\_\_\_\_ from the materials they are made from. Solids can feel \_\_\_\_\_, smooth, hard, or soft. Some solids float in water. Others \_\_\_\_\_ in water.

You can use tools to \_\_\_\_\_ solids. A ruler measures the length, the width, and the height of a solid. A ruler is used to measure lengths in units called \_\_\_\_\_ or in units called \_\_\_\_\_.

The amount of matter in a solid is called \_\_\_\_\_.

A \_\_\_\_\_ tells how much mass a solid has. Both methods of measurement can be used to form a more complete picture of objects.

# Natural or Made by People?

Read the Reading in Science pages in your book.

As you read, pay attention to important ideas.

Summarize them in the chart below. Remember, when you summarize, you retell the most important ideas in the selection.

Summary		
How are natural solids and human-made solids the same and different?		
_____		
_____		
_____		
↓	↓	↓
Idea #1	Idea #2	Idea #3
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Write About It**

**Summarize.** How is a plastic chair made? Use the chart you made to write your answer.

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What are some plastic things in your classroom?

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# Liquids and Gases

Use your book to help you fill in the blanks.

## What is a liquid?

1. The kind of matter that flows and has no shape is a \_\_\_\_\_ .
2. Unlike most solids, a liquid can take the shape of the \_\_\_\_\_ it is in.
3. You can measure the \_\_\_\_\_ of a liquid by using a measuring cup.
4. Volume is a measure of the amount of \_\_\_\_\_ something takes up.

## What is a gas?

5. The air we breath is made of many \_\_\_\_\_.
6. A gas has no \_\_\_\_\_ of its own.
7. All matter, even gas, takes up \_\_\_\_\_.

8. You can \_\_\_\_\_ the volume or the mass of a gas.
9. The \_\_\_\_\_ around us is made of many gases.

### **Critical Thinking**

11. What solids, liquids, and gases do you use every day?

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# Liquids and Gases

Classify the words in the box based on their state of matter.

air	glass	ice	milk	water
apple	honey	juice	pencil	

Solids	Liquids	Gases
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

# Liquids and Gases

Fill in the blanks. Use the words from the box.

air	containers	liquid	plants	three
breathe	gas	oxygen	solid	volume

We use matter every day. Our clothes, shoes, breakfast, and even the \_\_\_\_\_ we breathe are kinds of matter. There are \_\_\_\_\_ kinds of matter. A \_\_\_\_\_ is a kind of matter that has its own shape. A \_\_\_\_\_ is a kind of matter that does not have a shape of its own. A \_\_\_\_\_ is another kind of matter that does not have its own shape. Gases and liquids take the shapes of the \_\_\_\_\_ they are in. \_\_\_\_\_ is a measure of how much space matter takes up.

The air we \_\_\_\_\_ is made of many gases. Animals and \_\_\_\_\_ need oxygen to live. We cannot see gases, but they are all around us.

# Fun with Water



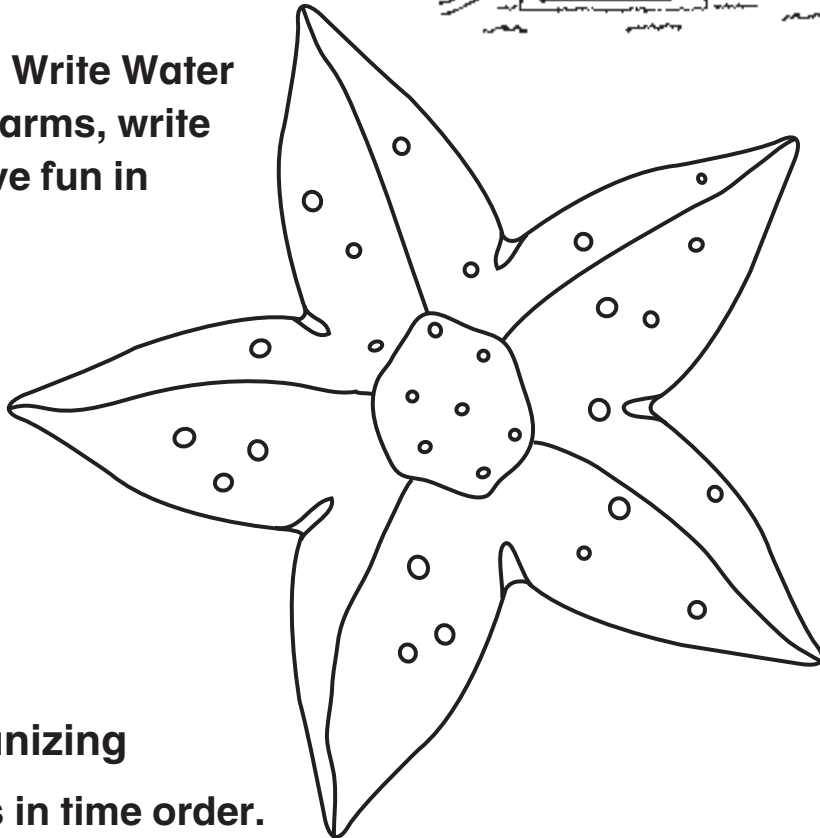
## Write About It

This girl is having fun in the water!  
Think of times that you have had  
fun in water. Draw and write about  
what you did.



## Getting Ideas

Look at the starfish. Write **Water**  
in the center. In the arms, write  
things you do to have fun in  
the water.



## Planning and Organizing

Put these sentences in time order.

\_\_\_\_\_ I jumped into the water.

\_\_\_\_\_ I put on my bathing suit and packed some toys.

\_\_\_\_\_ My mother and I walked to the beach.

## Drafting

**Write a sentence to begin your story. Use I to write about yourself.**

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**Now write your story on a separate piece of paper. Tell about fun that you have had in the water. Tell how the water made you feel.**

## Revising and Proofreading

**Julia wrote some sentences. She made five mistakes. Find the mistakes. Then correct them.**

Lucy and i walked to the ocean for a swim. His  
dad went with us. We jumped in the weaves.  
The water felt cool. We through a beach ball  
back and forth. We floated on an alligator raft.  
We got tired after about a hour and sat on our  
towels.

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I write about what I did in the water?
- ▶ Did I tell how I felt?
- ▶ Did I correct all mistakes?

# Changes of State

Use your book to help you fill in the blanks.

## How can heating change matter?

1. Heat can change \_\_\_\_\_ in different ways.
2. When a solid gets enough \_\_\_\_\_, it melts.
3. When something melts, it changes from a \_\_\_\_\_ to a liquid.
4. When heat is added to ice, it turns into \_\_\_\_\_ water.
5. Different solids can \_\_\_\_\_ at different temperatures.
6. Some liquids \_\_\_\_\_ when they get enough heat.
7. When liquid water boils, it \_\_\_\_\_, or changes into a gas.
8. This gas is called \_\_\_\_\_.

## How can cooling change matter?

9. When you \_\_\_\_\_ matter, you take heat away from it.
10. A gas can \_\_\_\_\_ when it is cooled.
11. When a \_\_\_\_\_ condenses, it changes into a liquid.
12. When \_\_\_\_\_ lose enough heat, they freeze.
13. When matter \_\_\_\_\_, it changes from a liquid to a solid.

## Critical Thinking

14. Explain how you can make an ice cube change from a solid to a gas.

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# Changes of State

Solve the riddles and fill in the puzzle.

## Down

1. I keep my shape when I'm cool.  
If it gets too warm, I melt.

\_\_\_\_\_

2. You can add me or take me away to  
change matter.

\_\_\_\_\_

4. This happens when I get very cold.

\_\_\_\_\_

6. When I start out very hot and then  
become cool, I turn into liquid.

\_\_\_\_\_

## Across

3. This is what I do when 6 Down happens.

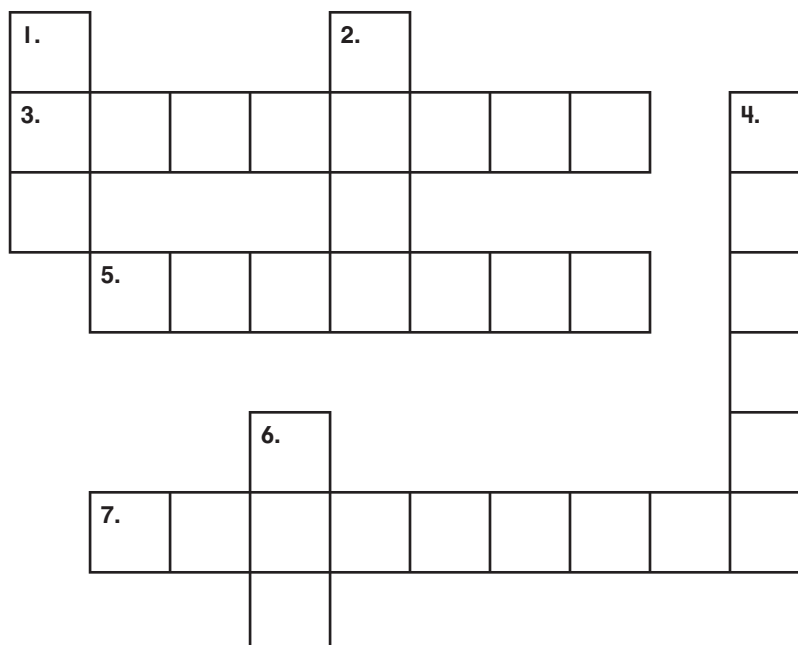
\_\_\_\_\_

5. This is how I turn solids into liquids.

\_\_\_\_\_

7. This is how I go into the air when  
I'm boiling.

\_\_\_\_\_



# Changes of State

Fill in the blanks. Use the words from the box.

condense

heat

solid

evaporate

liquid

temperatures

freeze

melt

water vapor

There are three main states, or forms, of matter.

The three main states are \_\_\_\_\_, liquid, and gas. Some solids \_\_\_\_\_ when they get enough heat. When something melts, it changes from a solid to a \_\_\_\_\_. That is what happens when an ice cube melts. Different solids must be heated to different \_\_\_\_\_ in order to melt. When water boils, it will \_\_\_\_\_, or turn into a gas. This gas is called \_\_\_\_\_.

When \_\_\_\_\_ is taken away from matter, it can change. Gases \_\_\_\_\_ when they are cooled. When you \_\_\_\_\_ water, it turns into a solid. Different liquids freeze at different temperatures.

# Colorful Creations

Read the Reading in Science pages in your book.  
Write inferences based on the statements in the  
“What I Know” column. Write your inferences on the  
chart.

What I Know	What I Infer
Most crayons are made of wax. Colored wax is melted into a liquid.	
The crayon mold is cooled with cold water.	
A machine packs the crayons into boxes.	

**Write About It**

**Predict.** What will happen if the mixture of wax is left out at room temperature?

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What two states of matter are used to make crayons?

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How do you think different-colored crayons are made?



# Looking at Matter

Fill in the blanks. Use the words in the box.

balance

matter

solid

mass

property

volume

1. Anything that takes up space and has mass  
is \_\_\_\_\_.
2. The amount of matter in an object is called  
\_\_\_\_\_.
3. A \_\_\_\_\_ can be used to measure and  
compare mass.
4. The amount of space something takes up is  
called \_\_\_\_\_.
5. A \_\_\_\_\_ has a shape of its own.
6. A \_\_\_\_\_ is how matter looks, feels,  
smells, sounds, or tastes.

**Write whether each fact describes a solid, a liquid, or a gas.**

**1.** This kind of matter melts to form a liquid.

\_\_\_\_\_

**2.** It cannot be seen, but it is everywhere.

\_\_\_\_\_

**3.** It evaporates to form a gas. \_\_\_\_\_

**4.** When it condenses, it turns into a liquid.

\_\_\_\_\_

**5.** When it is heated, it turns into a liquid, then into a gas. \_\_\_\_\_

**6.** When it freezes, it becomes a solid.

\_\_\_\_\_

# Energy and Motion

Fill in the important ideas as you read the chapter.

Use the words in the box to fill in the first column. Use your own ideas to fill in the second column.

heat

sound

magnets

forces

## Motion and Energy

## How We Use It

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# Heat

Use your book to help you fill in the blanks.

## What is heat?

1. Energy makes \_\_\_\_\_ move or change.
2. Heat is energy that can change the \_\_\_\_\_ of matter.
3. Heat can \_\_\_\_\_ solids and turn liquids into gases.
4. The \_\_\_\_\_ gives Earth most of its heat.
5. Something that gives off heat when it is burned is \_\_\_\_\_.
6. One kind of fuel that we get from plants is \_\_\_\_\_.
7. Rubbing your hands together quickly will make them \_\_\_\_\_.



## What is temperature?

8. We can tell how hot or cold something is by measuring its \_\_\_\_\_.
9. Some thermometers have a special \_\_\_\_\_ inside of them.
10. When the temperature is \_\_\_\_\_, the liquid goes up.
11. When the temperature is cool, the liquid goes \_\_\_\_\_.

## Critical Thinking

12. What are some sources of heat?  
How do we measure this energy?

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# Heat

Read each sentence. Write **TRUE** if the sentence is true. Write **NOT TRUE** if the sentence is false.

1. \_\_\_\_\_ Heat can change the states of matter of some objects.
2. \_\_\_\_\_ Heat can turn a gas into a solid.
3. \_\_\_\_\_ Most heat comes from the Moon.
4. \_\_\_\_\_ Gas, oil, wood, and coal are all types of fuel.
5. \_\_\_\_\_ Temperature is a measure of how hot or cold something is.
6. \_\_\_\_\_ Thermometers measure how fast someone is running.

# Heat

Fill in the blanks. Use the words from the box.

coal

heat

rub

fuel

matter

temperature

There are many elements of energy. Energy makes \_\_\_\_\_ move or change. The Sun gives \_\_\_\_\_ to Earth. Heat keeps us warm.

Not all heat comes from the Sun. Gas, oil, wood, and \_\_\_\_\_ give off heat. Things that give off heat when burned are called \_\_\_\_\_. You can make heat, too! When you \_\_\_\_\_ your hands together quickly, the motion makes heat.

A measure of hot and cold is called \_\_\_\_\_. A thermometer is a tool that people use to measure temperature.

# Sound

Use your book to help you fill in the blanks.

## What makes sound?

1. Another kind of energy we use every day is \_\_\_\_\_.
2. When objects \_\_\_\_\_, they give off sound energy.
3. *Vibrate* means “to move \_\_\_\_\_ and forth quickly.”
4. When your \_\_\_\_\_ vibrates, you hear sound.
5. Your \_\_\_\_\_ helps you figure out what you are hearing.

## How are sounds different?

6. Some sounds are \_\_\_\_\_ and some sounds are loud.
7. Soft sounds have less energy than \_\_\_\_\_ sounds.

8. Some sounds have a higher \_\_\_\_\_  
than other sounds.
9. Pitch is how high or \_\_\_\_\_ a sound is.

### What do sounds move through?

10. Sound can \_\_\_\_\_ through air.
11. Sound energy can even move through  
\_\_\_\_\_ and many liquids!

### Critical Thinking

12. How do we hear sound? How are sounds different?

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# Sound

Describe what each picture shows about sound. Use the words *vibrating*, *sound*, and *pitch* in your answers.

1.



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2.



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3.



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# Sound

**Fill in the blanks. Use the words from the box.**

eardrum	liquids	sound
energy	pitch	vibrate

Did you know that we can hear a kind of energy? The kind of energy that we can hear is \_\_\_\_\_. Sound energy is made when objects \_\_\_\_\_. Sound can travel through air. Sound can also travel through solids and \_\_\_\_\_. The closer you are to a sound, the louder it will be.

How do we hear these sounds? The part of our body we use to hear sounds is the \_\_\_\_\_. It sends messages to our brain about what sound we heard. Not all sounds are the same. A whisper has less \_\_\_\_\_ than a shout. The \_\_\_\_\_ is how high or low a sound is. Imagine a guitar's strings. The tighter the strings are, the higher the pitch is. There are many different sounds.

# Sound Off!

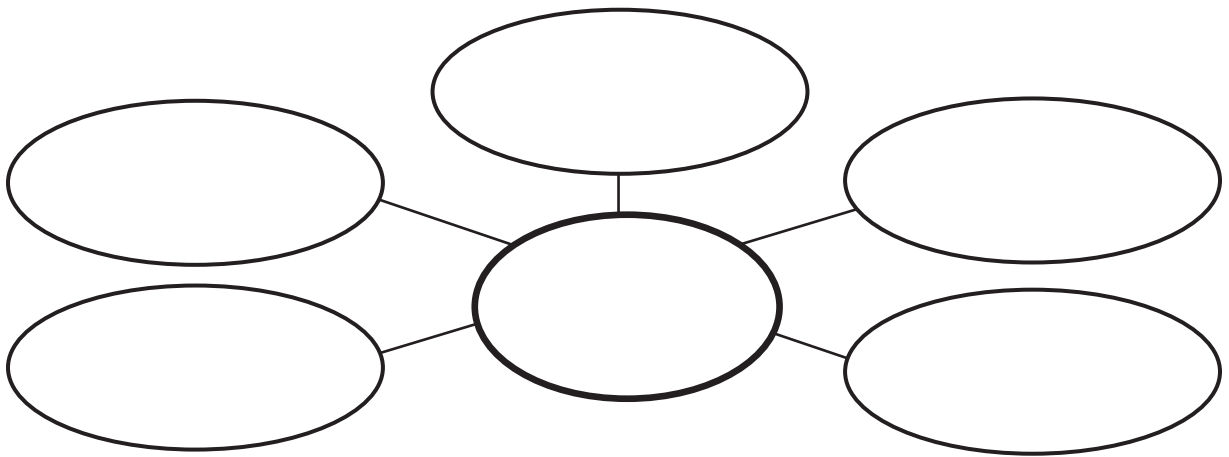


## Write About It

Describe the pitch and volume of a sound you hear every day. How do we use sounds? Why are sounds important?

## Getting Ideas

Choose a sound you hear every day. Write it in the center oval. In the outer ovals, write words that describe that sound.



## Planning and Organizing

Circle the descriptive words in these sentences.

1. The brown sparrow sang loudly.
2. The little sparrow sang a pretty song.



**Drafting**

Write a sentence to begin your paragraph that tells an important idea about a sound you hear every day.

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Write about the sound on a separate piece of paper. Remember to use descriptive words.

**Revising and Proofreading**

Pedro wrote a paragraph. He did not use any describing words. Fill in the blank spaces with words from the box.

loudly

noisy

quiet

screeching

Yesterday, we went for a walk. We heard many traffic sounds. Two drivers were honking their horns \_\_\_\_\_. They wanted to make sure a boy on a bike saw them. A car stopped at a red light. It made a \_\_\_\_\_ sound. Then two fire engines went zooming past us. The traffic sounds were so \_\_\_\_\_. There was not one \_\_\_\_\_ place in the city.

# Exploring Magnets

Use your book to help you fill in the blanks.

## What do magnets do?

1. Magnets can \_\_\_\_\_ some objects.
2. Magnets can pull objects that contain \_\_\_\_\_ or iron.
3. Strong magnets can \_\_\_\_\_ objects that are far away.
4. Magnets can pull objects without \_\_\_\_\_ them.
5. Magnets cannot pull objects made of \_\_\_\_\_ or plastic.

## What are poles?

6. The \_\_\_\_\_ are the two ends of a magnet.
7. All magnets have a north pole and a \_\_\_\_\_ pole.
8. The \_\_\_\_\_ pole and the south pole are opposites.
9. The north pole of one magnet and the south pole of another magnet will \_\_\_\_\_ each other.
10. Two like magnetic poles will \_\_\_\_\_ one another.

## Critical Thinking

11. How do people use magnets?

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## Exploring Magnets

If the objects will attract each other, write *Will attract*.

If the objects will repel each other, write *Will repel*. If

the objects will not attract or repel each other, write

*Will not attract or repel*.

1. a magnet and a screw \_\_\_\_\_
2. a magnet and a pencil \_\_\_\_\_
3. one magnet's north pole and another magnet's  
south pole \_\_\_\_\_
4. one magnet's north pole and another magnet's  
north pole \_\_\_\_\_
5. a magnet and a penny \_\_\_\_\_
6. a magnet and a paper clip  
\_\_\_\_\_

## Exploring Magnets

Fill in the blanks. Use the words from the box.

attract

magnet

north

iron

nickel

south

It is possible to move objects without even touching them. A \_\_\_\_\_ can make some things move. It uses force to \_\_\_\_\_, or pull, some objects. It can pull objects that contain \_\_\_\_\_, like paper clips and screws. It can also pull objects containing \_\_\_\_\_. A magnet can not attract things made of wood or plastic.

Every magnet has two poles. If the \_\_\_\_\_ pole of one magnet is put next to the south pole of another magnet, the two magnets will attract. If the \_\_\_\_\_ pole of one magnet is put next to the south pole of another, the two magnets will repel. Magnets are powerful!

# Forces and Motion

Use your book to help you fill in the blanks.

## What are position and motion?

1. An object's \_\_\_\_\_ is the place where it is located.
2. You can describe an object's \_\_\_\_\_ by telling how its position changed.

## What are forces?

3. A push or pull is a \_\_\_\_\_.
4. When you push something, you move it \_\_\_\_\_ you.
5. To pull something, you move it \_\_\_\_\_ you.
6. When you throw a ball in the air, \_\_\_\_\_ pulls it back to Earth.
7. Gravity is a force that \_\_\_\_\_ things to Earth.
8. One \_\_\_\_\_ of gravity is weight.
9. \_\_\_\_\_ is how much force it takes to pull something to Earth.

## How can forces change motion?

- 10.** Forces can make things \_\_\_\_\_ up or slow down.
- 11.** Forces can also make things \_\_\_\_\_ direction.

## Critical Thinking

- 12.** Do you think gravity is important? Why or why not?

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# Forces and Motion

Answer each riddle. Then find each word in the word search.

1. I am a force that pulls things to Earth.

What am I? \_\_\_\_\_

2. I am a push or a pull. What am I? \_\_\_\_\_

3. I am the amount of force Earth pulls on an object. What am I? \_\_\_\_\_

4. I am where something is. What am I? \_\_\_\_\_

5. I am a change in the position of an object.

What am I? \_\_\_\_\_

f	s	n	d	t	r	o	m	d	w
o	l	m	s	h	i	e	o	g	e
r	z	g	r	a	v	i	t	y	i
c	a	t	v	m	p	s	i	u	g
e	m	n	x	y	r	l	o	e	h
p	o	s	i	t	i	o	n	o	t



## Forces and Motion

Fill in the blanks. Use the words from the box.

amount

down

pull

away

force

push

direction

gravity

How do you move things? Think about the last time you threw a ball. You used a \_\_\_\_\_ to move the ball. A force is a \_\_\_\_\_ or a pull that makes objects move. When you \_\_\_\_\_ an object, you move it closer to you. When you push an object, it moves \_\_\_\_\_ from you.

You can use forces to speed up or slow \_\_\_\_\_ an object. Forces can even change the \_\_\_\_\_ of an object's motion. The force that pulls objects to Earth is called \_\_\_\_\_. The \_\_\_\_\_ of force that gravity pulls down on an object is called weight. People use forces every day.

# Energy and Motion

Fill in the blank boxes. Use the words in the box.

heat

sound

magnets

forces



push or pull things



lets us hear things



attract objects made of certain metals



keeps things warm

# Energy and Motion

Fill in the blanks. Use the words in the box.

attract	gravity	motion	position	vibration
force	heat	pitch	repel	weight
fuel	magnet	pole	sound	

1. Every \_\_\_\_\_. has a north pole and a south \_\_\_\_\_.
2. Everything on Earth is pulled down by \_\_\_\_\_. The amount of force that pulls down on an object is its \_\_\_\_\_.
3. If you burn a \_\_\_\_\_, such as wood or oil, you produce \_\_\_\_\_.
4. A magnetic north pole and a south pole \_\_\_\_\_ each other. Two north poles \_\_\_\_\_ each other.
5. The place where something is its \_\_\_\_\_. A change in object's position is \_\_\_\_\_.

# Popcorn Hop

by Stephanie Calmenson

Read the Unit Literature pages in your book.



## Write About It

### Response to Literature

1. What makes the popcorn hop?

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2. How do you think popcorn got its name?

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3. How do living things use heat?

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# We Use Tools

Use your book to help you fill in the blanks.

1. Every day, we use \_\_\_\_\_ to help us do things.
2. Technology helps us \_\_\_\_\_, communicate, and stay healthy and safe.

## Technology Can Help Us

3. Technology depends on \_\_\_\_\_ .
4. Tools can be helpful, but sometimes they can \_\_\_\_\_ us.

## Critical Thinking

5. What tools can tell us about weather?

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# We Use Tools

Circle the words in each box that tell about the word at the top of the box.

## 1. tools

broom	shovel	ideas
people	music	telescope

## 2. technology

water	plants	medicine
scientist	scissors	car

# We Use Tools

Fill in the blanks. Use the words from the box one time.

pollute	telescopes	tools	easier
computers	medicines	side effects	communicate

Scissors and brooms are some \_\_\_\_\_ we use every day. They help to make our lives \_\_\_\_\_. Some technology helps us to travel, stay healthy, and \_\_\_\_\_.

Some tools, such as \_\_\_\_\_ and \_\_\_\_\_ help scientists learn about our world. Yet helpful technology, such as cars, can harm us when they \_\_\_\_\_ the air. We can stay healthy by using \_\_\_\_\_. However this technology can also harm us if there are unwanted \_\_\_\_\_.

# A Tool to Look Inside

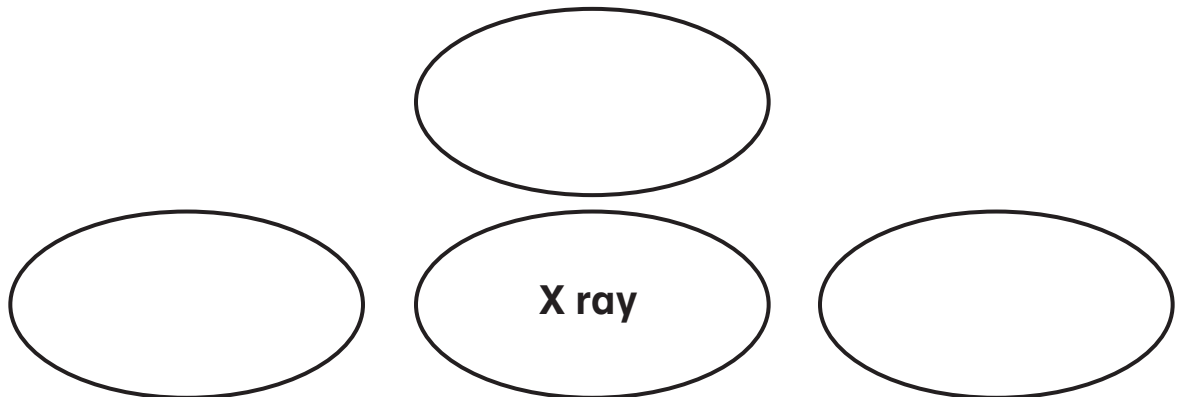


## Write About It

**Summarize** On a separate sheet of paper, write a paragraph that tells when a doctor or dentist might need to see what is inside of you.

## Getting Ideas

Write the word **X ray** in the main idea oval. Write details about when you might need an X ray in each oval.



## Planning and Organizing

Anita wrote three sentences. Write **Detail** if the sentence tells a detail. Write **Main Idea** if the sentence tells a main idea.

1. \_\_\_\_\_ X rays can see bones and teeth.
2. \_\_\_\_\_ People get cavities in teeth.
3. \_\_\_\_\_ People may break bones when they fall.



## Drafting

**Write your paragraph on a separate piece of paper.  
A topic sentence tells the main idea. Start your  
paragraph by writing a topic sentence.**

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**Now write your paragraph on a separate piece of  
paper. Write about when a doctor or dentist might  
need to see what is inside.**

## Revising and Proofreading

**Anita wrote some sentences. She made five mistakes.  
Find the errors. Then correct them.**

You might need an X ray sum day. you might feel  
a small hole in a teeth. You might fall and break a  
bone The X ray can show a dentist or docter if  
something is wrong.

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I write a topic sentence?
- ▶ Did I tell when a doctor or dentist might need to  
see what is inside a person?
- ▶ Did I correct all mistakes?

# Materials and Their Uses

Use your book to help you fill in the blanks.

1. The materials we use are made by \_\_\_\_\_ or nature.
2. Natural \_\_\_\_\_ come from nature.

## Properties of Natural Resources

3. The way a material looks, feels, smells, or \_\_\_\_\_ are its properties.
4. One material made by people that does not grow in nature is \_\_\_\_\_.

## Critical Thinking

5. Write about a natural resource and how you can help save it.

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# Materials and Their Uses

Fill in the blanks. Then find the words in the puzzle.

1. Materials from nature are natural  
\_\_\_\_\_.
2. Animals and \_\_\_\_\_ are living materials from nature.
3. Minerals are \_\_\_\_\_ materials from nature.
4. Softness is a \_\_\_\_\_ of cotton.

N	O	P	R	O	P	E	R	T	Y
R	P	L	N	O	N	R	M	T	O
L	I	A	K	F	U	R	A	L	P
N	O	N	L	I	V	I	N	G	G
X	P	T	A	N	I	M	A	L	S
R	E	S	O	U	R	C	E	S	T

# Materials and Their Uses

Fill in the blanks. Use the words from the box one time.

nonliving

limited

properties

minerals

plastic

living

cotton

nature

Materials made by \_\_\_\_\_ are called natural resources. Natural resources such as cotton, animals, water, and \_\_\_\_\_ come from Earth. The two different kinds of natural resources are \_\_\_\_\_ and \_\_\_\_\_.

Different materials are chosen for their different \_\_\_\_\_. Towels and shirts are made from \_\_\_\_\_ because it is soft. Many things are made from \_\_\_\_\_ because it can be soft or hard. Some natural resources will not last forever. These are called \_\_\_\_\_ natural resources.

# Money



## Write About It

Explain how coins are made.

### Getting Ideas

Fill in the sequence chart to tell how coins are made.

<div></div>	<div></div>	<div></div>	<div></div>
First	Next	Next	Last

### Planning and Organizing

Jose wrote these sentences. Write Yes if the sentence is true. Write No if the sentence is not true.

1. \_\_\_\_\_ Coins are sent to a mint first.
2. \_\_\_\_\_ Melted metal is poured into a coin press.
3. \_\_\_\_\_ A machine makes metal circles.

## Drafting

**Write your paragraph on a separate piece of paper.  
A topic sentence tells the main idea. Start your  
paragraph by writing a topic sentence.**

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**Now write your paragraph on a separate piece of  
paper. Write about the correct order in which coins  
are made.**

## Revising and Proofreading

**Jose wrote some sentences. He made five mistakes.  
Find the errors. Then correct them.**

Do you know how money is made. Their are many  
steps to making coins. Furst, you melt metal and  
pour it out. A coin press stamps circels.  
Then a machine cut metal.

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I write a topic sentence?
- ▶ Did I tell how coins are made?
- ▶ Did I correct all mistakes?

## From Idea to Invention

Use your book to help you fill in the blanks.

1. Aimee had the \_\_\_\_\_ of bringing her pet hamster to the animal doctor.
2. To \_\_\_\_\_ means to draw, plan, build, and test an idea.
3. Aimee drew \_\_\_\_\_ of each of her ideas.

## Making a Model

4. Aimee decided that the \_\_\_\_\_ would make the best hamster carrier.
5. Aimee followed her drawing and made a \_\_\_\_\_.

## Critical Thinking

6. What is the same about all inventions?

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# From Idea to Invention

Fill in the missing letters to complete each sentence.

1. Something that has to be solved is called a  
p r \_ \_ \_ m .
2. A \_ \_ \_ \_ t i o n is a way fix something.
3. To d \_ \_ \_ \_ n is to draw, plant, build,  
and test an idea.
4. You test an idea by making a m \_ \_ \_ \_ .



## From Idea to Invention

Fill in the blanks. Use the words from the box one time.

model

problem

solutions

test

model

An invention begins with a \_\_\_\_\_, or something that needs to be solved. You think of ideas that are possible \_\_\_\_\_ to a problem. You draw, plan, build, and \_\_\_\_\_ your ideas.

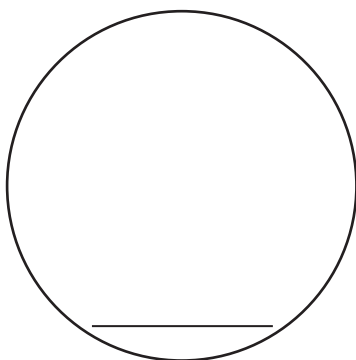
After you draw a design, you use materials to build a \_\_\_\_\_. This will show you if the design works or if changes are needed.

**Talk About It****Testing, Testing****Write About It**

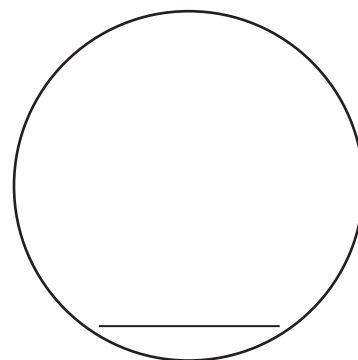
Write how you would test a new kind of toy truck.

**Getting Ideas**

Fill in the chart below to show what you might do to test a new kind of toy truck.



**Ideas for  
Testing**

**Planning and Organizing**

**Peter wrote these sentences about his new kind of toy truck. Write Yes if the sentence describes details about the new kind of toy truck. Write No if it does not.**

1. \_\_\_\_\_ It is made of hard plastic.
2. \_\_\_\_\_ It is important to test toys for safety.

## Drafting

**Write your paragraph on a separate piece of paper.  
A topic sentence tells the main idea. Start your  
paragraph by writing a topic sentence.**

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**Now write your paragraph on a separate piece of  
paper. Write about how you would test a new kind of  
toy truck.**

## Revising and Proofreading

**Here is part of Peter's paragraph about how he would  
test a toy. Help him complete the sentences.**

It is very \_\_\_\_\_ to test new  
toys. New toys must be \_\_\_\_\_ for  
children to use. This is especially true for very  
\_\_\_\_\_ children. New toys cannot have  
\_\_\_\_\_ parts that children might fall.  
Children might swallow these \_\_\_\_\_ .

**Now revise and proofread your writing. Ask yourself:**

- ▶ Did I write a topic sentence?
- ▶ Did I tell how I would test a new kind of toy truck?
- ▶ Did I correct all mistakes?