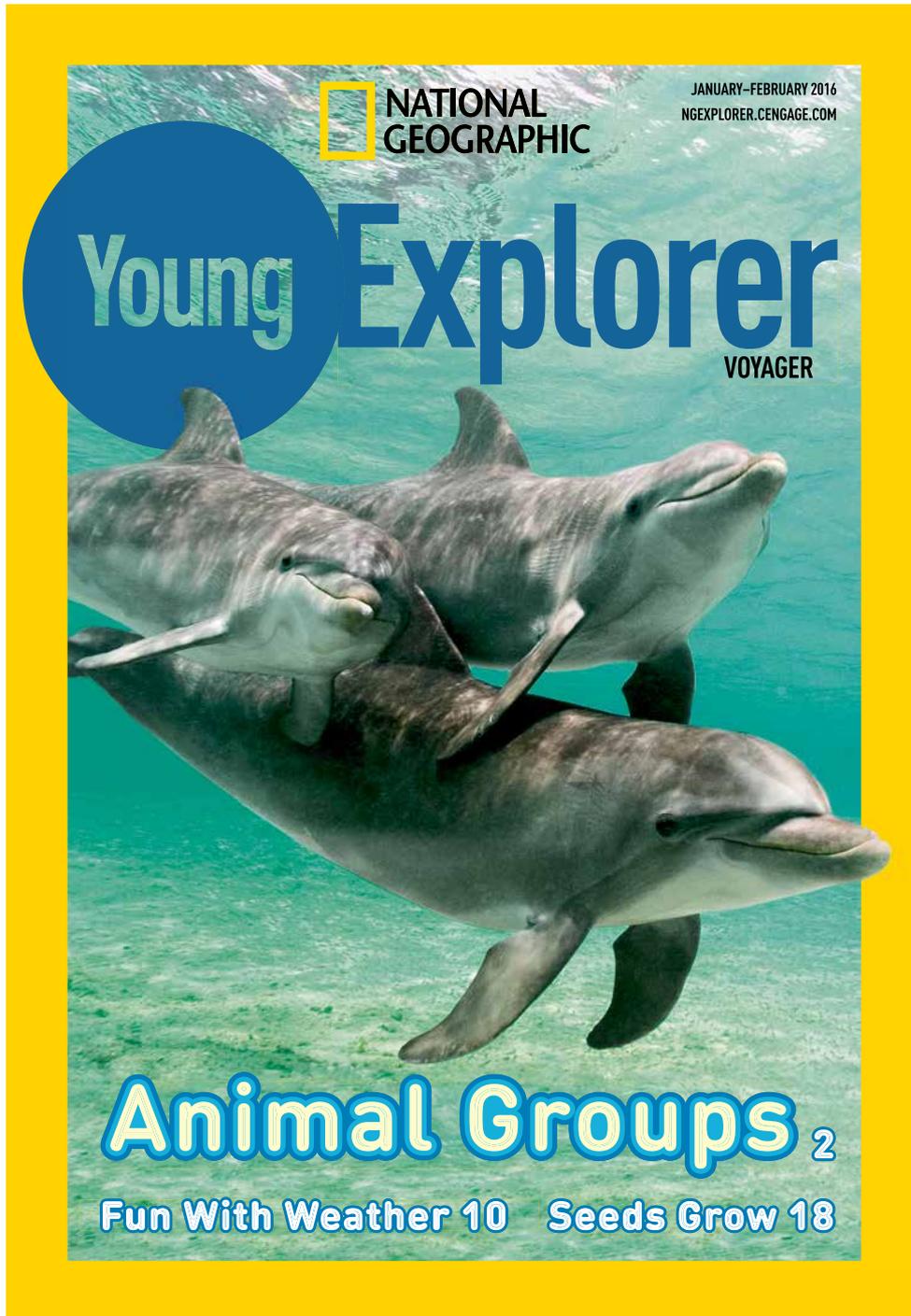


# TEACHER'S GUIDE



**Voyager (Grade 1)**  
**January-February 2016**

## In This Guide

In this guide, you will find language arts and science lessons for the stories in the January-February 2016 edition of YOUNG EXPLORER VOYAGER.

## Young Explorer Magazine

YOUNG EXPLORER classroom magazines for kindergarten and grade 1 develop young reader's literacy skills through engaging informational text. Great storytelling and stunning photographs teach students about our planet and the people, plants, and animals that live on it. Encourage your students to read and explore our world with YOUNG EXPLORER magazines.

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# Animal Groups

## LANGUAGE ARTS

### Objectives

- Students will use labels to locate key facts or information in the text.
- Students will ask and answer questions about key details in the text.

### Resources

- Vocabulary Assessment Master (page 6)
- Animal Groups Cards (Teacher's Edition)

### Summary

Some animals of the same kind live together in groups. Names of animal groups include a school of fish, a herd of elephants, an army of frogs, and a pod of dolphins.

## BUILD VOCABULARY AND CONCEPTS

- **school**
- **herd**
- **army**
- **pod**

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Say the words aloud and then ask students if they have heard them before. Have students share what they know about each word.

Explain that some of the words have more than one meaning. For example, the word "school" can mean both *a place where students go to learn* and *a group of fish*. Students might not be familiar with the word "pod." Explain that this word also has more than one meaning. It can mean *a part of a plant that holds seeds*. It can also mean *a container or compartment that holds or protects something*. If possible, provide photos of seedpods and of the pod of a spacecraft, such as the escape pod on the International Space Station. Explain that the word "pod" is also the name of a group of animals. Let students know that in this article, all of the vocabulary words are names for groups of animals and that they'll find out more about the words—including "pod"—when they read the article.

## READ AND DISCUSS

### Living in Groups

Read the article to students as they follow along. You may want to read the entire article or you may want to read each two-page spread and spend time discussing the concepts before moving on to the next two-page spread.

Before reading, ask students to listen and look for the vocabulary words. Let students know you will be asking them questions about the text and will be interested in any questions they may have.

### Front Cover

Display the front cover of the magazine. After identifying the title of the magazine, point to the titles of the articles. Explain that this magazine doesn't have a table contents inside, like some books. Instead, the articles are listed on the cover. Say: **The cover shows the titles of the articles and the page numbers where the articles start.** Model looking for an article and then turning to a page where it begins. Then have pairs work together; one partner identifies an article he or she would like to read, and the other tells the page number where it begins.

Pages 2–3 Point out and read the title of the article. Ask: **Where did we just see this title?** (*on the table of contents on the front cover*) Then ask students to point out the vocabulary word "school" in the label and in the text. Ask: **What is a group of fish called?** (*a school*) Ask: **How are the fish in the school alike?** (*They are the same kind of fish; they have the same shape, body parts, and pattern of colors.*) Explain that a label helps readers identify important information. Ask: **What information does this label help you identify?** (*the name of a group of fish*)

# Animal Groups

## LANGUAGE ARTS

### READ AND DISCUSS

#### Living in Groups (continued)

Pages 4–5 Ask students to point out the vocabulary word “herd” in the text and in the label. Ask: **What is a group of elephants called?** (*a herd*) Point out that if students forget what a group of elephants is called, they can find out quickly by looking at the label. Ask: **What other animals do you know of that gather in herds?** (*Possible answers: horses, cows*) Say: **The text says that the elephants look alike. How are the elephants in the herd alike?** (*They are all large, have large ears, and wrinkly gray skin.*) Students might also notice differences; for example some elephants are bigger than others. They might also notice that the elephant on the far right has a smaller ear. It is an Asian elephant, while the others are African elephants. Lead students to understand that they are not in the same herd because they are not alike and live in different places. Then discuss the label.

Pages 6–7 Ask students to point out the vocabulary word “army.” Ask: **What is a group of frogs called?** (*an army*) Ask students to share what they think of when they hear the word. (*Be culturally sensitive to students who come from countries in which the military has a negative connotation.*) You might ask students why they think that name was chosen for a group of frogs. Also help students associate the word “army” with a large, organized group. Ask: **How do the frogs look alike?** (*They have the same shape, size, body parts, and coloring.*) Point to the frog on the far right and then to the label. Ask: **Why do you think the label is not placed near this frog?** (*Because the frog is not with the group, or army, of frogs.*) **What else could you label in the picture?** (*the log; parts of the frogs; the water*)

Pages 8–9 Ask students to point out the vocabulary word “pod.” Ask: **What is a group of dolphins called?** (*a pod*) Explain that some people have different names for the same group of animals. Say: **Some people call a group of dolphins a pod, but others call it a school.** Point out that the two pods of dolphins appear to be different colors. Help students understand that all dolphins are actually gray—the dolphins underwater look blue because of the water. Answer the question at the end of the article by discussing other ways the dolphins are alike. (*They have the same shape and body parts.*) Ask: **What else could you label?**

### WRITE AND ASSESS

You may want students to write about what they learned to assess understanding. Ask students to write or draw the answers to the following questions:

- **What did you learn about animal groups?**
- **Draw a group of animals. Label the group. Write about your picture.**

You can also assess students’ understanding of vocabulary with the Vocabulary Assessment Master for this article.

# Animal Groups

## SCIENCE

### Objectives

- Students will understand that animal groups have names.
- Students will understand that individuals of the same kind of animal can look alike.

### Resources

- Science Assessment Master (page 7)
- Animal Groups Cards (Teacher's Edition)

### Science Background

Observation is an important science skill. Students use observation skills when they recognize similarities and differences among individual animals in a group. For example, they observe that individual fish in a school look alike although some may be bigger or have a slightly different pattern of markings than others.

Scientists observe how living things are alike and different in order to classify them. Biological classification helps scientists organize how living things are alike and different and shows relationships among living things. Animals that are classified as the same species have the same traits. For example, elephants that belong to the species commonly known as African elephants have large ears. This trait distinguishes them from Asian elephants, a different species that has smaller ears.

Many scientists use the skill of observation to further scientific knowledge. For example, Charles Darwin's ideas about natural selection were based on his observation of similarities and differences in the traits of living things in the Galapagos and other places. Although students may not be classifying animals into scientific categories, when they observe how animals—such as fish in a school—are alike or different they are practicing a powerful science skill.

### ENGAGE

Engage students in a discussion about names of animal groups. Start by brainstorming a list of animal group names, such as herd, school, and flock. Write the animal group names in one column of a T-chart. In the other column, list the animals that belong in each animal group.

Animal	Animal Group
horses, cows	herd
fish	school
birds, sheep	flock

### Animal Groups Cards

You may wish to use the Animal Groups cards to assist students as they brainstorm animals that belong in each group. Later, you may wish to encourage pairs or small groups of students to explore the Animal Groups cards on their own. They can use them to match groups of animals that share the same group name.

### EXPLORE

Continue to use the T-chart. List animals with group names that students don't know but want to find out. Then work with students to research names for the groups. Add the animals and their group names to the T-chart.

Animal	Animal Group
horses, cows	herd
fish	school
birds, sheep	flock
monkeys	troop
lions	pride

# Animal Groups

## SCIENCE

### EXPLAIN

Read the article to students.

Use the following sentence frame and have students fill in the blanks with information from the article.

A group of \_\_\_\_ is called a \_\_\_\_.

Have students draw a group of animals to go with each sentence. Have them share the pictures with the class.

#### Animal Groups Cards

The *Animal Groups* cards can be used to assist students as they brainstorm animals that belong in each group. Later, you may wish to encourage pairs or small groups of students to explore the Animal Groups cards on their own. They can use them to match groups of animals that share the same group name.

### ELABORATE

You might want to create a class book using the sentence frame "A group of \_\_\_\_ is called a \_\_\_\_." from the Explain section of this lesson. In the class book, include examples from the article and additional animal groups that students have learned about or researched throughout the lesson. Students should also include illustrations in their book. Display the book in the classroom or in the school library.

### EVALUATE

Assess students' understanding of animal groups with the Science Assessment Master for this article. You might also want to ask them the following questions:

- **What are the names of some animal groups?** (*school, herd, army, pod*)
- **How do elephants in a herd look alike?** (*They have long trunks, gray wrinkly skin, and small eyes.*)

Name \_\_\_\_\_

Date \_\_\_\_\_

## ASSESS VOCABULARY: Animal Groups

Draw a picture of an animal group.

Label the group.



Tell about your picture.

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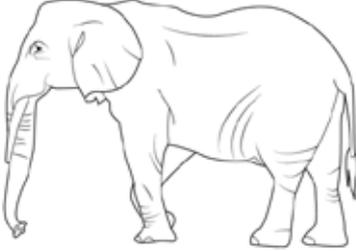
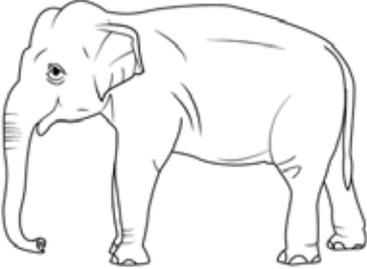
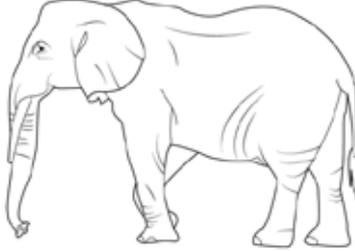
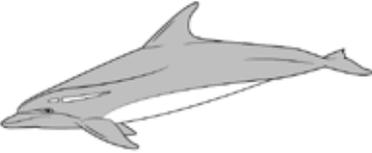
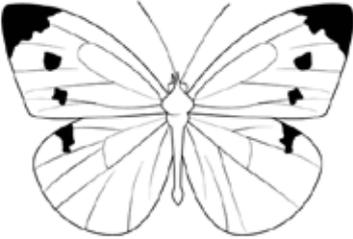
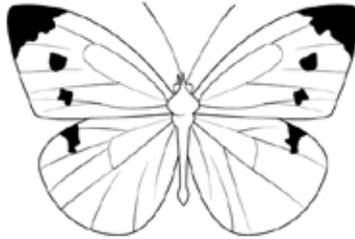
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## ASSESS SCIENCE: Animal Groups

Circle the animals that are alike. Tell how the other animal is different.

<p>1.</p> 		
<p>2.</p> 		
<p>3.</p> 		
<p>4.</p> 		
<p>5.</p> 		

## LANGUAGE ARTS

### Objectives

- Students will use words in the text to describe experiences from their own lives.
- Students will distinguish between information provided by pictures and information provided by text.

### Resources

- Tell About the Weather poster (Teacher's Edition)
- Vocabulary Assessment Master (page 11)
- Fun With Weather IWB Lesson (website) (optional)

### Summary

People have fun in a park in windy, cloudy, rainy, snowy, and sunny weather.

## BUILD VOCABULARY AND CONCEPTS

- **windy**
- **rainy**
- **sunny**
- **cloudy**
- **snowy**

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Also display a set of weather icons and photos, or use photos from the article, "Fun With Weather." Say each word aloud and have students match the word to the corresponding weather icon and photo. Working with partners, have students take turns making up sentences that include the weather words.

You may also wish to use the *Tell About the Weather Words to Explore* poster to practice the vocabulary words. As a summative assessment or review activity, cover the words on the poster with sticky notes. Then test your students' knowledge of the words.

## READ AND DISCUSS

### Kinds of Weather

Read the article to students as they follow along. You may want to read the entire article, or you may want to read each two-page spread and spend time discussing the concepts before moving on to the next two-page spread.

Before reading, ask students to listen and look for the vocabulary words. Tell students that you will be asking them to use weather words in the text to tell about experiences with weather in their own lives.

Pages 10–11 Ask students to point out the vocabulary word "windy." Ask: **How can you tell that the weather in the picture is windy?** (*The kite is filled with wind.*) Have students describe the activity in the picture. (*The kite is pulling the man on the lake.*) Lead a discussion about windy weather. Have students talk with a partner. They can take turns telling about a time when they experienced windy weather, what it felt like, and how the wind affected what they did.

Pages 12–13 Ask students to point out the vocabulary word "rainy." Also point out the label "rain." Write both words on the board so students can see the relationship between them. Provide a sentence that uses both words, such as: **When rain falls, it is rainy.** Do the same with the word "cloudy." Then ask: **What can you observe about the weather in this picture?** (*rain is falling; the sky is cloudy*) Point out the small round photo. Explain that it gives more information about rain by showing how it looks close up.

Guide students to understand the connection between clouds and rain. Ask: **Where does the rain come from?** (*clouds*) Have students describe what the child in the photo is wearing. Then have them turn and talk to a partner, describing their own experiences with rainy and cloudy weather.

### READ AND DISCUSS

#### Kinds of Weather (continued)

Pages 14–15 Ask students to point out the vocabulary word “snowy.” Also point out the label “snow.” Write both words on the board so students can see the relationship between them. Provide a sentence that uses both words, such as: **When snow falls, it is snowy.** Ask: **What kind of weather does this picture show?** (*snowy, cold*) Point out the small round photo. Explain that it gives more information about snow by showing how it looks close up.

Then ask: **Where does snow come from?** (*clouds*) Guide students to understand the connection between snow and cold. Ask: **When do you think snow falls instead of rain?** (*when it is cold outside*) **Why do you think the woman is wearing long sleeves, long pants, and boots?** (*Possible answers: to keep warm; to keep the cold snow off her skin*) Then have them turn and talk to a partner, describing experiences they’ve had with snowy weather or snowy weather they’ve seen on TV or in movies or books.

Pages 16–17 Ask students to point out the vocabulary word “sunny.” Also point out the label, “sun.” Write both words on the board. Provide a sentence that uses both words, such as: **You can see the sun on a sunny day.** Then ask: **How can you tell that this picture was taken on a sunny day?** (*Sun shines on the rock. There are shadows.*) **Do you think the weather is sunny and warm or sunny and cold? Why?** (*Sunny and warm because the climbers are not wearing jackets.*) Explain that even when there are a few clouds in the sky, the weather is sunny if we can see the sun and the sky is mostly blue. Ask: **Why do you think sunny weather is better for climbing rocks than rainy, snowy, or windy weather?** (*Rain or snow could make rocks slippery; wind could blow people or gear.*)

### WRITE AND ASSESS

You may want students to write about what they learned to assess understanding. Ask students to write or draw the answers to the following questions:

- **What kinds of weather did you learn about?**
- **Draw a weather picture. Label your picture.**

You can also assess students’ understanding of vocabulary with the Vocabulary Assessment Master for this article.

# Fun With Weather

## SCIENCE

### Objective

- Students will observe and describe the weather.

### Resources

- Tell About the Weather poster (Teacher's Edition)
- Science Assessment Master (page X)
- Fun With Weather IWB Lesson (website) (optional)

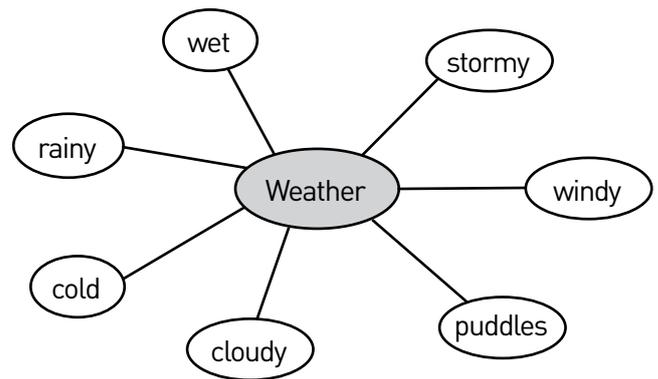
### Science Background

All of the photos in "Fun With Weather" were taken in Yosemite National Park. The park is located in the state of California in the United States. As the photos show, Yosemite experiences a broad range of weather. Many people confuse the terms "weather" and "climate." Weather and climate are not the same. Weather is the condition of the atmosphere at a specific time and place. Factors that affect the weather include temperature, precipitation, wind, humidity, sunlight, and air pressure. Climate, on the other hand, is the long-term pattern of weather in a region. Climate is often determined by data collected over a period of 30 years. Another way to understand climate is that is average weather conditions over a long period of time—usually decades.

One reason why scientists measure and record the weather is so they can notice patterns over time. Scientists use a variety of tools to gather information about wind, humidity, rain, and the strength of the sun. Students can make simple weather stations using tools such as a thermometer, a rain gauge, and an anemometer to measure wind speed and direction. However, the most valuable weather tool students have is their ability to observe, using their eyes, ears, and their sense of touch.

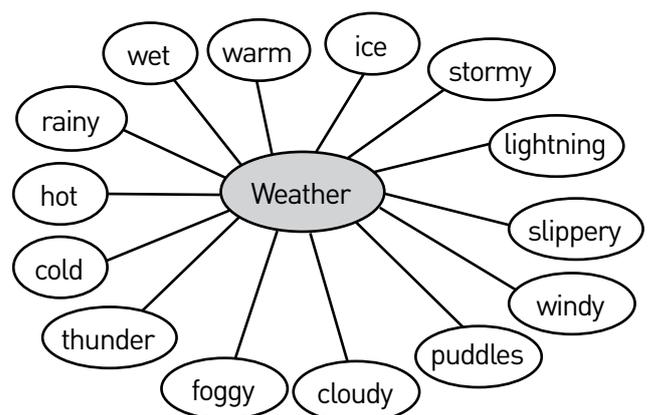
### ENGAGE

Engage students in a discussion about the weather. If possible, take your students outside. Ask: **What can you observe about the weather today? What words can you use to describe the weather?** Encourage students to think of words to describe the temperature, precipitation, wind conditions, and how sunny or cloudy it is. Record the words in a word web.



### EXPLORE

Show students pictures of many different kinds of weather from the article and from other sources. Have students call out words that describe the weather in the pictures. You might prompt them by asking about weather they've experienced in different seasons or seen on TV or in movies or books. Add the new words and information to the word web.



### EXPLAIN

Read the article to students.

After reading, have students recall the title of the article, "Fun With Weather." Have students draw or write about an outdoor activity that is fun to do in a particular kind of weather.

Have students share their work with the class. You might also add activity-related words or other words from the article to the graphic organizer.

### ELABORATE

Display a simple forecast chart for your local area. Focus students' attention on the weather icon for today. You might want to cover the rest of the chart to help them focus. Have students observe the current weather outside and then determine if the forecast chart is accurate. Then have students look at the forecast for the next few days. Based on the icons and days of the week, they can practice with a partner, delivering the forecast for the next day.

For further practice, you may wish to make your own weather chart. Add columns for each day of the week. Have students use pictures and words to record their observations in the chart. Encourage as many students as possible to observe and then record their observations.

### EVALUATE

Assess students' understanding of weather with the Science Assessment Master for this article. You might also ask them the following questions:

- **What words can you use to describe weather?**  
(*windy, cloudy, rainy, snowy, sunny*)
- **What can fall from clouds when the air is cold?** (*snow*)

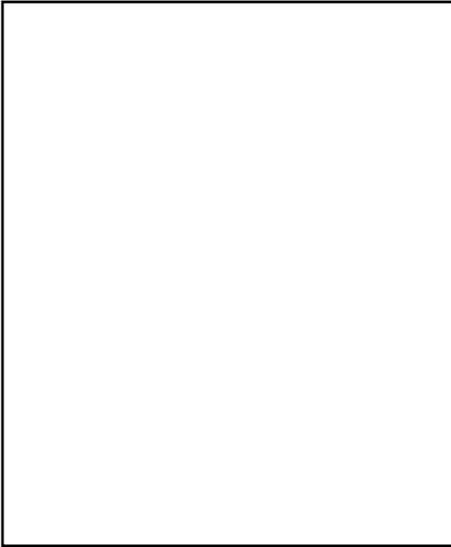
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## ASSESS VOCABULARY: Fun With Weather

Draw a picture to show the weather.

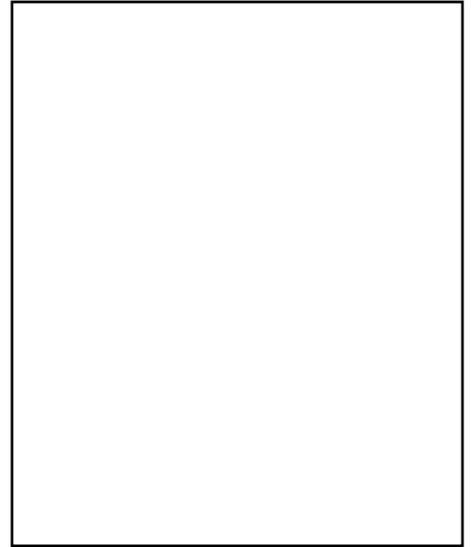
Write a sentence for each picture.



windy



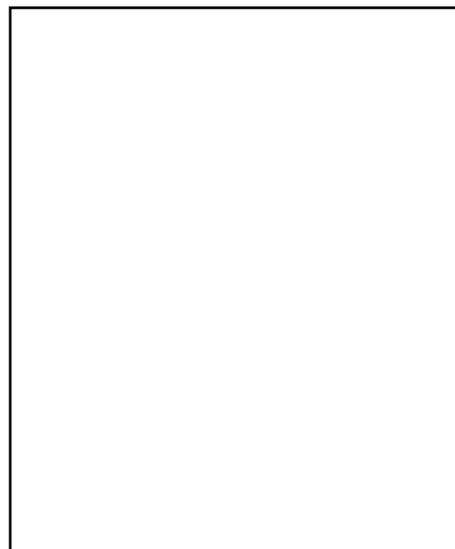
cloudy



rainy



snowy

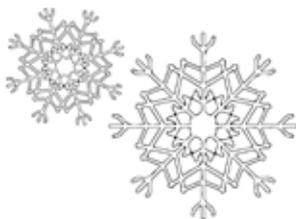
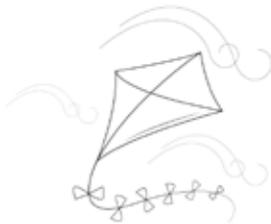
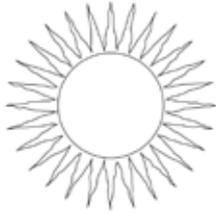


sunny

**ASSESS SCIENCE: Fun With Weather**

Match the weather to the right clothes.

Then complete each sentence. Use the weather words.



1. Mittens are for \_\_\_\_\_ weather.

2. Boots are for \_\_\_\_\_ weather.

3. Flip-flops are for \_\_\_\_\_ weather.

4. A jacket is for \_\_\_\_\_ weather.

### Objective

- Students will describe the connection between two pieces of information in a text.
- Students will describe the relationship between photos and text.

### Resources

- Young Plants and Adult Plants poster (Teacher's Edition)
- Vocabulary Assessment Master (page 18)

### Summary

Different kinds of plants grow from different kinds of seeds. A sunflower plant grows from a sunflower seed. An oak tree grows from an acorn. The seeds sprout and develop roots, a stem or trunk, leaves, flowers, and eventually new seeds. Then the cycle continues.

### BUILD VOCABULARY AND CONCEPTS

- seed
- root
- leaf
- stem
- flower
- trunk

Introduce the vocabulary words to students by displaying the words in the classroom on a word wall or on a board. Say the words aloud and then present each word in context and have students sketch their idea of the meaning of each word on a piece of paper. Do this with each word. When finished have students turn and share their drawings with a partner. Ask them to explain, compare, and contrast their sketches.

### READ AND DISCUSS

#### Plants Grow from Seeds

Read the article to students as they follow along. You may want to read the entire article, or you may want to read each two-page spread and spend time discussing the concepts before moving on to the next two-page spread.

Before reading, ask students to listen and look for the vocabulary words. Tell students that they will learn about two plants, and that at the end of the article you will ask them to tell about how the two plants are alike.

Pages 18–19 Ask students to point out the vocabulary word “seeds” in the title and text. Have students look at the photo as you read the text. Ask: **What did you learn about seeds?** (*Plants can grow from seeds.*) **What is happening in the photo?** (*Plants are growing.*) Ask: **Are these plants small or tall?** (*small*) **What do you think might happen to the plants next?** (*They might grow tall.*)

Pages 20–21 Have students point out the vocabulary words “seed,” “root(s),” “leaf,” “stem,” and “flower.” Explain that the words in the photos are labels. Ask: **Why did the writer put labels on the photos?** (*to name the parts of the plant*)

Have students observe and describe each photo in the series. Ask: **What do the three photos show?** (*a seed sprouting and growing into a sunflower plant*) Say: **Let's read the text again and connect each sentence to a picture.** As you read the sentences, have students connect them to pictures. For example, sentences 1 and 2 describe the first picture; sentence 3 describes the second picture; the remaining sentences describe the third picture. Ask: **How do the pictures and text help you understand how the seed grows?** (*Both give information about the seed; the pictures show how it grows; the text describes how it grows.*) Ask: **What does the text tell us that the picture does not?** (*The text tells information that isn't shown, such as that the root holds the plant in the ground, and that the sunflower makes more seeds.*) **The text says that weeks pass. Can you tell that weeks pass by looking at the picture?** (*Yes, because time is needed for the little plant to grow a sunflower.*)

### READ AND DISCUSS

#### Plants Grow from Seeds (continued)

Pages 22–23 Have students point out the vocabulary word “seed.” Say: **This seed is called an acorn. An acorn is the seed of an oak tree.** Continue with the other words: “roots,” “leaf,” “stem,” and “trunk.” Have students observe and describe each photo in the series. Ask: **What do the three photos show?** (*an acorn sprouting and growing into a tree*) In the first picture, point to the tiny stem that is growing upward. Say: **What do you think this will become?** (*the stem*) Then point to the stem in the second photo. Ask: **What do you think this will become?** (*the trunk*)

Focus on the text. Students might notice that the word *Thud* is italicized and has an exclamation point. Elicit from students that it has this treatment because it describes a sound. Then say: **Let’s read the text again and connect each sentence to a picture.** (*Sentences 1 and 2 describe picture 1; sentence 3 describes picture 2; sentences 5 and 6 describe picture 3.*) Point out the question *What happens next?* Guide students to understand that roots can grow from the new acorns and that the life cycle can continue.

Then guide students to make a connection between the sunflower plant and the tree. Ask: **How are the sunflower plant and the oak tree alike?** (*They have many of the same parts; they go through the same pattern of growth: a root grows from a seed; a stem sprouts and grows; leaves grow; the stem grows taller; seeds develop on the plant. New plants can grow from the seeds.*)

### WRITE AND ASSESS

You may want students to write about what they learned to assess understanding. Ask students to write or draw the answers to the following questions:

- **Draw a sunflower plant and label its parts.**
- **What are the parts of a sunflower plant?**
- **How does a sunflower seed grow and change?**

You can also assess students’ understanding of vocabulary with the Vocabulary Assessment Master for this article.

### Objective

- Students will describe the life cycle of a plant.

### Resources

- Young Plants and Adult Plants poster (Teacher's Edition)
- Science Assessment Master (page 19)

### Science Background

Most students know that many plants grow from seeds, but they might not know that seeds come in a huge variety of forms. In the article, they learn that an acorn is a seed. They might not realize that they've probably seen seeds in nature. For example, the "helicopters," or samaras, that fall from maple trees contain seeds, that pine cones contain seeds, or that if they look closely at the fluffy white part of a dandelion, they would see a tiny seed.

Students also might not realize that many foods are seeds. Nuts have a hard covering that protects a seed inside. If they eat a walnut or an almond, they are eating a seed. A kernel of corn, a grain of rice, peanuts, and the beans in a bowl of chili are also seeds. Students are more likely to know that fruits, such as oranges, apples, and watermelons, contain seeds.

If students are interested in planting seeds to watch them grow, it's important to know that many foods are treated so the seeds won't sprout. For this reason, it's usually best to purchase seeds meant for gardening. Radish seeds and bean seeds are among the fastest common garden seeds to sprout. Bean seeds are easy to handle. They can sprout in a zipper bag so students can observe the growth of the roots, or in soil so they can observe the stem and other parts grow as the plant matures. Under ideal conditions, the bean plant can mature to complete the cycle—to the point that the blossoms develop into pods that contain seeds that look like the seed that the plant grew from.

### ENGAGE

Engage students in a discussion about seeds and plant growth. You might ask if they have ever planted and grown seeds. Ask: **What kind of seeds did you plant? What did they look like? What happened after you planted them?**

### EXPLORE

Explain that beans are a kind of seed. Bring in and soak several kidney beans or lima beans in water for several hours. Then have students carefully remove and then describe the seed coats. They can then split the beans open and observe the structures inside with a hand lens. They will be able to observe tiny structures that develop into roots and stems. Have partners describe the parts.

### EXPLAIN

Read the article to students.

After reading, have students draw a sequence showing how a plant grows and develops from a seed. Students should label their drawings using the plants parts listed below. If students are using a science notebook, you may want them to record their ideas there. Have students share what they learned with the class.

- seed
- stem
- root(s)
- flower
- leaf
- trunk

### ELABORATE

Post the list of plant parts the class learned about. Challenge students to find a plant or a picture of a plant at school, outdoors, or at home. Have them draw the plant and label its parts. Then guide students to compare the plants they drew with the plants in the article. Students can also compare their plant drawings with others in the class. Ask questions such as:

- **How is the plant like the plants in the article? How is it different?**
- **Does your plant have all of the parts on our list?**
- **Does the plant have parts that are not on our list?**

Add any new plant parts to the list.

### EVALUATE

Assess students' understanding of plant growth with the Science Assessment Master for this article. You might also want to ask them the following questions:

- **What are the parts of an oak tree?** (*roots, trunk, leaves, acorns*)
- **How does an oak tree grow?** (*An acorn falls. A root grows from the acorn. A stem and leaves grow. The stem grows into a tree trunk.*)

### Poster Objective

- Students will describe how young plants are very much, but not exactly, like their parents

### ENGAGE

Engage students in a discussion about the similarities and differences between young plants and their parents. Display pages 22 and 23 of the magazine and point out the photos of the young tree and adult tree. Lead students to describe how the young tree is similar to the adult tree. Ask: **How are the young tree and the adult tree alike?** (*Both have green leaves; both have a stem or trunk.*) **How are they different?** (*The adult tree is taller; it has branches and more leaves; the trunk is thick and has brown bark; it makes acorns.*)

### EXPLORE

Display the *Young Plants and Adult Plants* poster, having first covered the purple labels in the Venn diagram with sticky notes. Read the title and text at the top of the poster. Also read the headings "young cactus" and "adult cactus" and have volunteers identify each in the pictures. Then lead students to describe how they are alike and different.

### EXPLAIN

Explain how the Venn diagram is used to compare the cacti. Point out the three parts of the diagram: **the two circles and the overlap**. Read the heading "alike" and uncover and read the top label, "has sharp spines." Say: **The labels in the overlap tell how the young cactus and the adult cactus are alike. The adult cactus has sharp spines. The young cactus has sharp spines, too.** Uncover and read the remaining "alike" labels and have students recall whether their descriptions of how the young and adult cacti are alike are the same as those in the diagram.

Next, say: **The labels in the circles describe how the cacti are different.** Then uncover, read, and discuss the labels. Explain that there are no flowers on the adult cactus in the photo because it blooms only in spring. In the spring it will have flowers that develop into fruit. Young cacti do not have flowers.

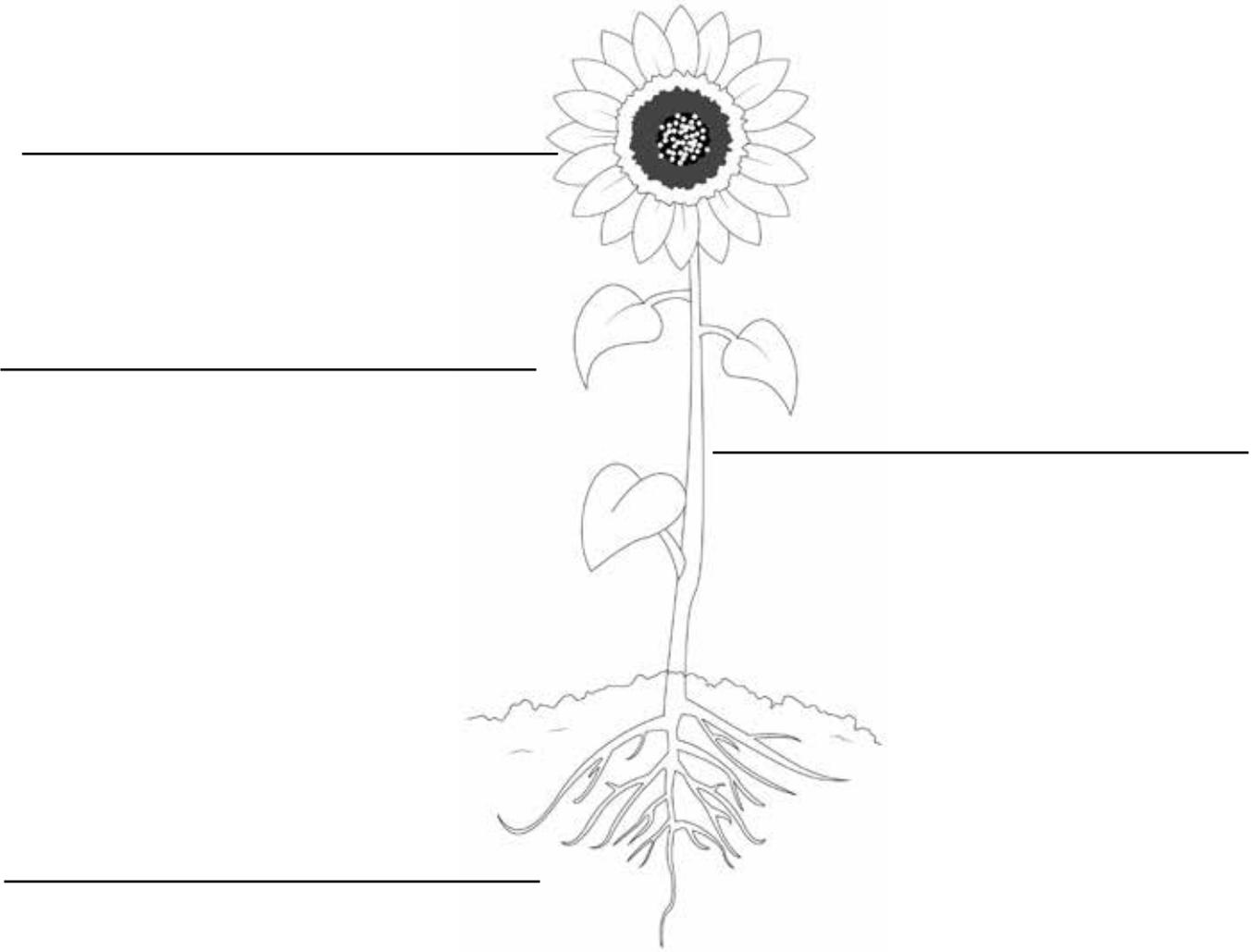
### ELABORATE

As a class, create a new Venn diagram comparing a different young plant to an adult plant. You might want to compare the young and adult oak trees on pages 22 and 23, drawing on students' descriptions from the Engage section above. Say: **Now let's compare a young tree and an adult tree. How are they alike?** (*has green leaves; has a stem or trunk*) **How are they different?** (*short/tall; has four leaves/has many leaves; has slim green stem/has thick brown trunk; does not have bark/has bark*)

**ASSESS VOCABULARY: Seeds Grow**

Label each part of the plant. Use words from the Word Bank.

flower      leaf      roots      seed      stem      trunk



Finish each sentence. Use words from the Word Bank.

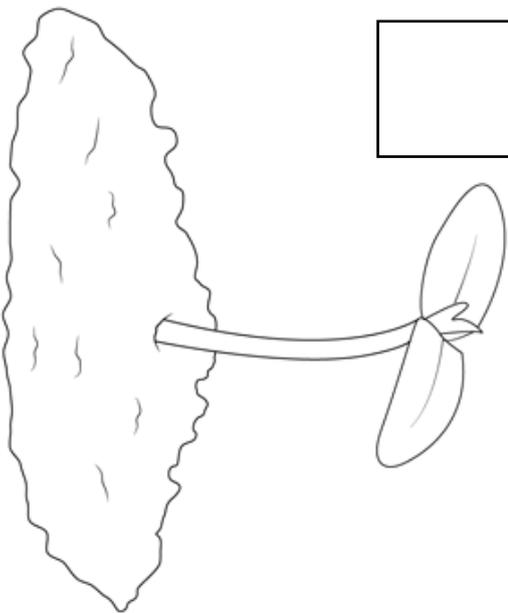
1. A plant can grow from a \_\_\_\_\_.

2. A stem can grow into a tree \_\_\_\_\_.

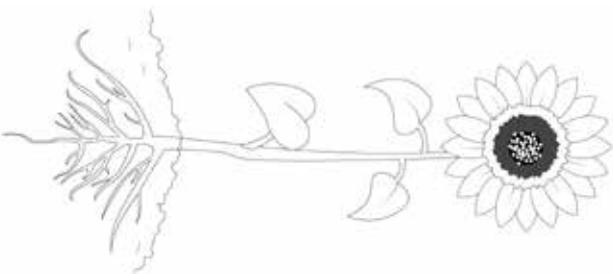
# ASSESS SCIENCE: Seeds Grow

How does a plant grow?

Write 1, 2, or 3 to show the correct order. Write a sentence about each picture.



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



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



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

### Animal Groups

#### Assess Vocabulary, page 6

Students' drawings should show a group of the same kind of animals. It should be labeled.

Each student's writing should accurately describe the animal group drawn in the box above.

#### Assess Science, page 7

Students should circle the animals that are alike.

Students should tell about the animal that is different.

1. The African elephants are alike. The Asian elephant is slightly smaller, has smaller ears, and has two humps on the top of its head.
2. The bull frogs are alike. The tree frog has stripes and toe pads to help it climb.
3. The common dolphins are alike. The bottlenose dolphin is all gray. It does not have a color pattern on its body.
4. The cabbage butterflies are alike. The morphe butterfly's wings have a different shape and pattern.
5. The emperor penguins are alike. The Humboldt penguin is smaller and has different black and white markings.

### Fun With Weather

#### Assess Vocabulary, page 12

Students' drawings should show sunny weather in the box marked "sunny," rainy weather in the box marked "rainy," windy weather in the box marked "windy," cloudy weather in the box marked "cloudy," and snowy weather in the box marked "snowy."

#### Assess Science, page 13

Students should draw a line to match each weather icon to the right clothes.

sunny icon → flip-flops  
rainy icon → rain boots  
windy icon → jacket  
snowy icon → mittens

#### Assess Science, page 13 (continued)

Possible answers to sentences:

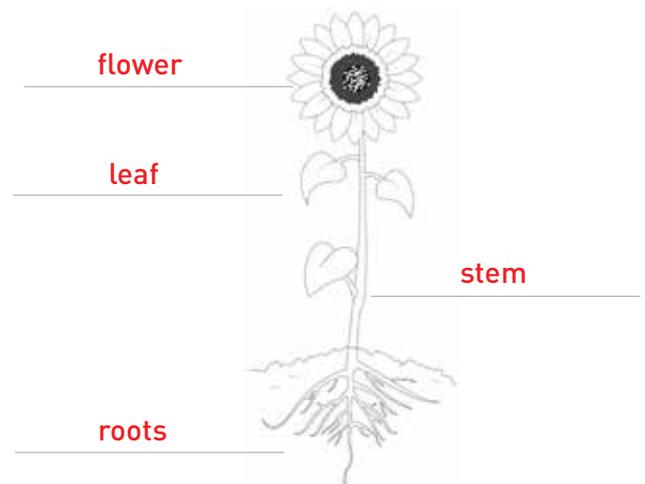
1. Mittens are for snowy weather.
2. Boots are for rainy weather.
3. Flip-flops are for sunny weather.
4. A jacket is for windy weather.

Accept other reasonable responses.

### Seeds Grow

#### Assess Vocabulary, page 18

Students should use the words in the Word Bank to label the parts of the plant.



1. A plant can grow from a seed.
2. A stem can grow into a tree trunk.

#### Assess Science, page 19

- 2 - sunflower sprout with small leaves
- 3 - mature sunflower plant with flower in bloom
- 1 - sunflower seed in soil

Students should correctly label and write a sentence about the image in each box.