



Scout (Kindergarten) Vol. 17 No. 2

In This Guide

In this guide, you will find language arts, science, and social studies lessons for the articles in this issue of YOUNG EXPLORER SCOUT.

Young Explorer Magazine

YOUNG EXPLORER classroom magazines for kindergarten and grade 1 develop young readers' 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.

Scout

The Scout edition is written for kindergarten students. Some articles with characteristics of emergent text will be easier for students to read. You may find that other articles are better suited for teacher read-alouds.

Visit YOUNG EXPLORER's website, [NatGeo.org/explorermag-resources](https://www.natgeo.org/explorermag-resources), to find additional resources for extending your students' learning.

Your Subscription Includes:

- Magazines
- Classroom Posters
- Projectable Magazine
- Teacher's Guide
- Interactive Edition (additional subscription required)

National Geographic Learning Framework

INTRODUCTION

BACKGROUND

Since 1888, the National Geographic Society has funded scientists and explorers and shared their findings with the world. To support educators who use our resources, we have created a Learning Framework, which lays out what we believe students should learn from their experiences with the Society.

PURPOSE

The Learning Framework was designed to convey the Society's core beliefs and values. It is built around a set of attitudes, skills, and knowledge that embody the explorer mindset.

To determine the learning outcomes within the Learning Framework, we dug deep into national standards in key subject areas. We also sought advice from subject matter and child development experts, along with the combined expertise of NG instructional designers, researchers, and content developers. To learn more, go to: <https://www.nationalgeographic.org/education/learningframework/>

IMPLEMENTATION

Each article in this magazine has a knowledge-based link to the Learning Framework. Students will use the skills and attitudes as they do the activity on the back cover. The activity relates to the article "Out at Night."

MINDSET OF AN EXPLORER

KEY FOCUS AREAS



Attitudes

National Geographic kids are:

CURIIOUS about how the world works, seeking out new and challenging experiences throughout their lives.

RESPONSIBLE, with concern for the welfare of other people, cultural resources, and the natural world. NG kids are respectful, considering multiple perspectives, and honoring others regardless of differences.

EMPOWERED to make a difference. NG kids act on curiosity, respect, and responsibility. They are adventurous and persist in the face of challenges.



Skills

National Geographic kids can:

OBSERVE and document the world around them and make sense of those observations.

COMMUNICATE experiences and ideas effectively through language and media. They are storytellers!

COLLABORATE with others to achieve goals.

SOLVE PROBLEMS by generating, evaluating, and implementing solutions after identifying alternatives, weighing trade-offs, and making well-reasoned decisions.



Knowledge

National Geographic kids understand:

THE HUMAN JOURNEY is all about where we have been, where we live now (and why), and where we are going.

OUR CHANGING PLANET encompasses all that coexists on our planet—interconnected through systems that generate and nurture each other.

WILDLIFE AND WILD PLACES inhabit our planet—from the butterflies in our back yards to the lions in Africa.

Objectives

- Students will follow words from left to right, top to bottom, and page by page.
- Students will ask and answer questions about key details in a text.

Standards Supported

- **CCSS Foundational Skills:** Demonstrate understanding of the organization and basic features of print. Follow words from left to right, top to bottom, and page by page. (K-1a)
- **CCSS Reading Informational Text:** With prompting and support, ask and answer questions about key details in a text. (K-1)

Resources

- Language Arts Master (page 5)

Summary

You can see your shadow on a sunny day. Your body and other things block the sunlight and make shadows. Your shadow moves with you. You need light to make a shadow. Your shadow goes away at night, when it is dark.

WORD WORK

Sight Words: *you, can, see, it, on, a, is, look, like, this, make, they, have, too, where, go, what, do, get, at, away*

BUILD VOCABULARY AND CONCEPTS

- sunny day
- shadow
- shape

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Start by talking with students about a sunny day. Ask them to discuss what that means. Then explain that a sunny day is a day when the sun is shining brightly in the sky. Do a picture walk through the article “Your Shadow” and point out the pictures of shadows. Let students know that you can see shadows like these on a sunny day. As you are looking at the pictures of the different shadows, point out that each shadow has a different shape. To further define *shape*, find different objects in the classroom that have simple shapes. Ask students to name those shapes, such as a ball is round or a block is square.

READ AND DISCUSS

Before reading, familiarize students with some of the organization and basic features of print. Point out the title and the text. Demonstrate by moving your finger across the text, showing students that you will be reading the words from left to right, top to bottom, and you will continue to do so page by page until the end of the article. Ask students to follow along as you read “Your Shadow” aloud. You may want to read the entire article first, and then reread the article, taking time to stop and discuss each two-page spread.

Pages 2–3 Read the title and the text aloud to students. After reading say: **What are some details we learned about your shadow?** (*You can see it on a sunny day. It is a dark shape. It looks like you.*) Continue by asking: **Do you have any comments or questions about a shadow after looking at the picture?** Students might have comments or questions about the size and shape of the shadow.

Pages 4–5 Read the text. Ask: **What makes your shadow?** (*Your body blocks light.*) **Look at the pictures. What are some other things that block light and have shadows?** (*dog, bike, tree, bird, ball*)

Pages 6–7 Read the text. Say and ask: **The text says your shadow is a copycat. What is a copycat?** (*Students might say that a copycat is someone who repeats or does exactly what you do. A copycat copies your movements.*) **In what way is your shadow a copycat?** (*It goes where you go, and it does what you do.*) **What do you need to make a shadow?** (*light*) **When does your shadow go away?** (*at night when it gets dark*)

TALK AND WRITE

Students can respond to the article by talking and writing. Use the following prompts to guide them. You might also want to use the Language Arts Master for this article.

- Talk about your shadow.
- Draw something you learned about shadows.

SCIENCE

Objective

- Students will learn that some objects block light. This causes shadows.

Standard Supported

• NGSS Crosscutting Concepts: Cause and Effect:

Events have causes that generate observable patterns. (K-PS3-1), (K-PS3-2)

Resources

- Dark Shadows poster (Teacher's Edition)
- Science Master (page 6)

Science Background

Shadows are formed when objects block light. Both living and nonliving objects can block light and form shadows. Shadows change when the angle of light changes. As the position of the sun shifts throughout the day, the size and position of shadows will also change. In the early morning and the late afternoon, shadows are long, but they are in different positions due to the angle of the sun. In midday, when the sun is overhead, shadows are short or may not be seen at all.

ENGAGE

Engage students by asking if they have ever seen their shadow. Ask them to describe what it looked like. You might also ask if they have made shadow figures or puppets with their hands.

EXPLORE

If it is a sunny day and you have access to a window or can take students outside, you might want to explore shadows. See how many shadows students can see, and have them note what objects are making the shadows. Ask them to make observations about the size, shape, and length of the shadows. You might also want to mention where the sun is in the sky and what time of day it is. Then later in the day, you could conduct the same observations with students, noting how the shadows have changed. This is a good activity for a science notebook. Students can draw what they see during each observation and discuss how and why the shadows changed.

EXPLAIN

After reading, have students turn and talk with a partner to tell what they learned about shadows. Then ask students to share what they learned with the whole class.

- You can see shadows on a sunny day.
- Shadows are dark shapes.
- Your body blocks light and makes a shadow.
- Other things can block light and make shadows.
- Your shadow goes where you go. It does what you do.
- At night your shadow goes away. It is dark, and you need light to make a shadow.

Explain to students that your body can block light from all light sources, not just the sun. You might want to experiment with this using other light sources.

ELABORATE

You can use the Dark Shadows poster to display examples of how to use your hands to block the light and make shadows of different animal shapes. Work with students to help them create the shapes with their hands. Students may also have other ideas for animal shapes they can make with their hands.

EVALUATE

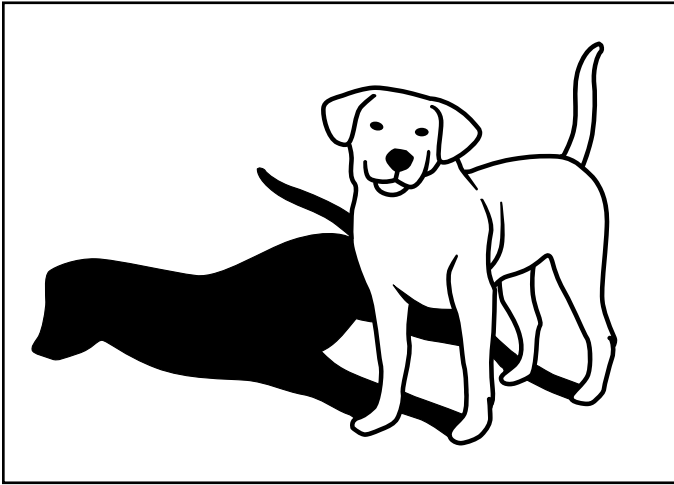
Assess students' understanding with the Science Master for this article. You might also use the following prompts.

- **What does a shadow look like?**
- **When can you see your shadow? When does it go away?**

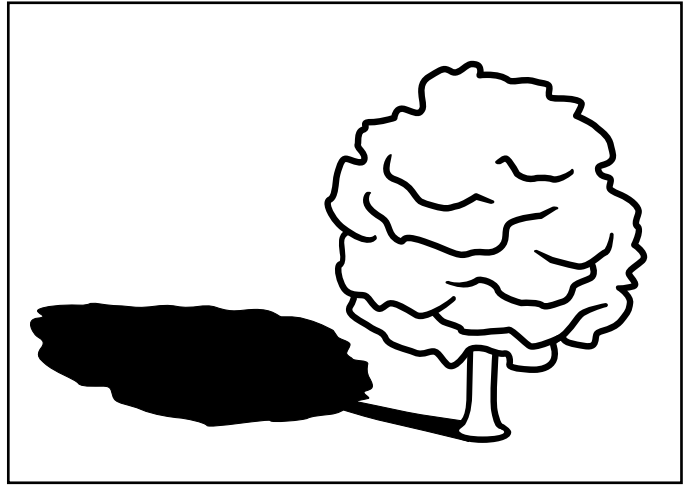
LANGUAGE ARTS: What Blocks the Sun?

What blocks the sun and makes a shadow?

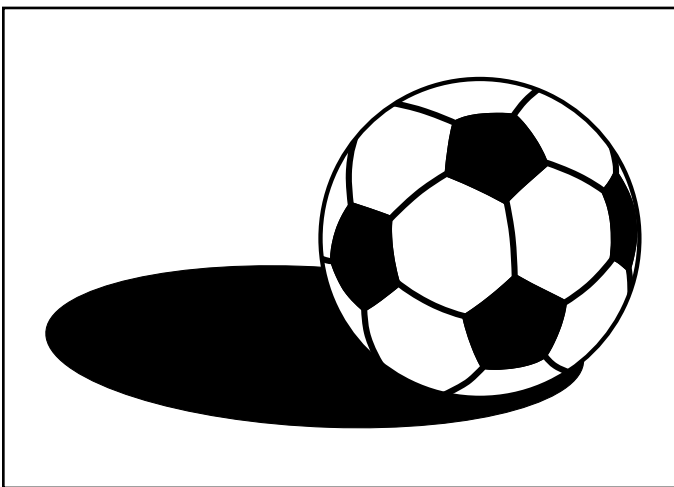
Write the first letter of each word. Use the letters **b**, **d**, **m**, and **t**.



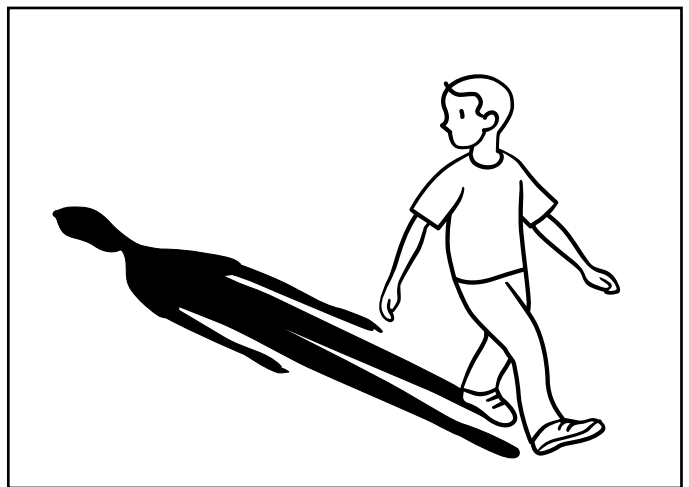
__og



__ree



__all



__e

SCIENCE: Match Up

Draw a line to match each dog to its shadow.

The image contains a matching exercise. On the left side, there are four line drawings of dogs: a husky sitting, a beagle sitting, a dachshund standing, and a golden retriever sitting. On the right side, there are four black silhouettes of dogs: a husky sitting, a beagle sitting, a golden retriever sitting, and a dachshund standing. A vertical line of five dots separates the two columns, with a dot positioned between each pair of corresponding dog and shadow.

Objectives

- Students will identify the main topic and retell key details of a text.
- Students will understand that the first word in a sentence and the pronoun *I* are capitalized.

Standards Supported

- **CCSS Reading Informational Text:** With prompting and support, identify the main topic and retell key details in a text. (K-2)
- **CCSS Language Standards:** Demonstrate command of the conventions of standard English capitalization. Capitalize the first word in a sentence and the pronoun *I*. (K-2a)

Resources

- Language Arts Master (page 9)

Summary

The sun is in the sky during the day. Daylight comes from the sun. I play during the day. Night follows day, and the sky is dark. I sleep at night. Earth spins and makes day and night. When Earth does not face the sun, it is night. When Earth faces the sun, it is day.

WORD WORK

Sight Words: *the, is, in, it, come, I, play, there, no, go, to, at, and, make, here, my, not*

BUILD VOCABULARY AND CONCEPTS

- day
- night
- light
- dark

The words above are used in the article “Day and Night.” Students may be familiar with these words. Pronounce the words for students. Have pictures available that will help students understand the meaning of the words, and use student-friendly definitions.

Post the words, along with pictures, on a classroom word wall. Refer to the word wall throughout discussion of the article, and remind students to use these words as they talk about the article with each other and with the class.

READ AND DISCUSS

Read the article “Day and Night” aloud to students as they follow along. You may want to read the entire article first, and then reread the article, taking time to stop and discuss each two-page spread.

Pages 8–9 Read the title and text on pages 8 and 9. Help students identify that the title lets us know that the topic of this article is about day and night. Say and ask: **These pages tell us about day. What did we learn about that?** (*When the sun is in the sky, it is day. Daylight comes from the sun.*) **What do the text and picture tell us a person can do in the day?** (*play*)

You might want to take some time to familiarize students with a few of the conventions of standard English capitalization. Say and ask: **Sentences begin with a capital letter. Can you point to the capital letters that begin each sentence?** (*Students should point to the letters that begin each sentence.*) You should also mention that even though the “I” begins the last sentence, it is always capitalized in English. The letter “I” in this case is a word that is used to refer to yourself.

Pages 10–11 Read the text. Ask: **What comes after day?** (*Night comes after day.*) **What happens at night?** (*There is no light from the sun, and the sky is dark.*) **What does the text tell us a person can do at night?** (*sleep*)

Pages 12–13 Read the text. Explain to students what is happening in the pictures. As Earth spins, day and night happen in different parts of Earth. Ask: **When it is night, does our part of Earth face the sun?** (*no*) **When it is day, does our part of Earth face the sun?** (*yes*)

TALK AND WRITE

Students can respond to the article by talking and writing. Use the following prompts to guide them. You might also want to use the Language Arts Master for this article.

- **Talk about what you learned about day and night.**
- **Draw something you learned about day and night.**

Objective

- Students will learn that day and night occur in a cycle, or pattern.

Standard Supported

- **NGSS Cross Cutting Concepts: Patterns:** Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (K-ESS2-1)

Resources

- Science Master (page 10)

Science Background

The sky is light during the day. The sun is the brightest object in the daytime sky. At night the sky is dark, and you can't see the sun. The stars and moon are sometimes seen in the nighttime sky. The pattern of day and night repeats over and over again. However, the length of day and night varies as the seasons change. It also varies from place to place. Areas close to the North and South Poles have differences in the length of day and night that are extreme during different times of the year. For example, in summer in Alaska, daylight may last for more than 20 hours. Then, in winter, the reverse happens, and the sky is dark for most of the day.

ENGAGE

Initiate a discussion about day and night. Create a two-column chart. Label one column "Day" and the other column "Night." Ask students to have a collaborative discussion about day and night. You can ask these questions to get the conversation started. In the chart, write down the information students share.

- **What is it like outside during the day?**
- **What is it like outside at night?**
- **What can you see in the sky during the day?**
- **What can you see in the sky at night?**
- **What are some things you can do during the day?**
- **What are some things you can do at night?**

EXPLORE

After engaging in discussion about day and night, you might ask students to become daytime explorers. If you can, take students outside to see if they can find more

things people and animals do during the day that you can add to the "Day" column of the class chart. Give students a set amount of time to observe. You could walk around the block in search of new information about daytime. For example, students may notice some of the following:

- person walking a dog
- squirrels, rabbits, chipmunks, bees, and birds searching for food
- cars going by without nighttime headlights on
- people riding bikes
- people wearing sunglasses
- people gardening
- people playing basketball or other sports outside
- young children playing in a park

EXPLAIN

Ask students to explain day and night by reviewing the article. Have them work with a partner and take turns telling what each two-page spread in the article explains. They can use the pictures to help them remember what they learned about day and night.

- The sun is in the sky during the day. Daylight comes from the sun. You can play during the day.
- Night comes after day. There is no light from the sun. The sky is dark. You can sleep at night.
- Earth spins and makes day and night. When my part of Earth is not facing the sun, it is night. When my part of Earth faces the sun, it is day.

ELABORATE

You can demonstrate day and night using a flashlight and a globe. Let student know that the light from the flashlight represents the sun, and the globe represents Earth.

- In a darkened room, shine the flashlight onto one side of a globe. Ask students which side is in the light/day and which side is in darkness/night.
- Slowly spin the globe to show that as Earth spins it is day and night in different places.

EVALUATE

Assess students' understanding with the Science Master for this article. You might also use the following prompts.

- **What is it like in the day?**
- **What is it like at night?**

LANGUAGE ARTS: Circle the Letters

Draw a line to match each lowercase letter to its capital letter.

a

c

i

s

t

I

A

C

T

S

Circle the capital letters.

1. The sky is dark.

2. It is night.

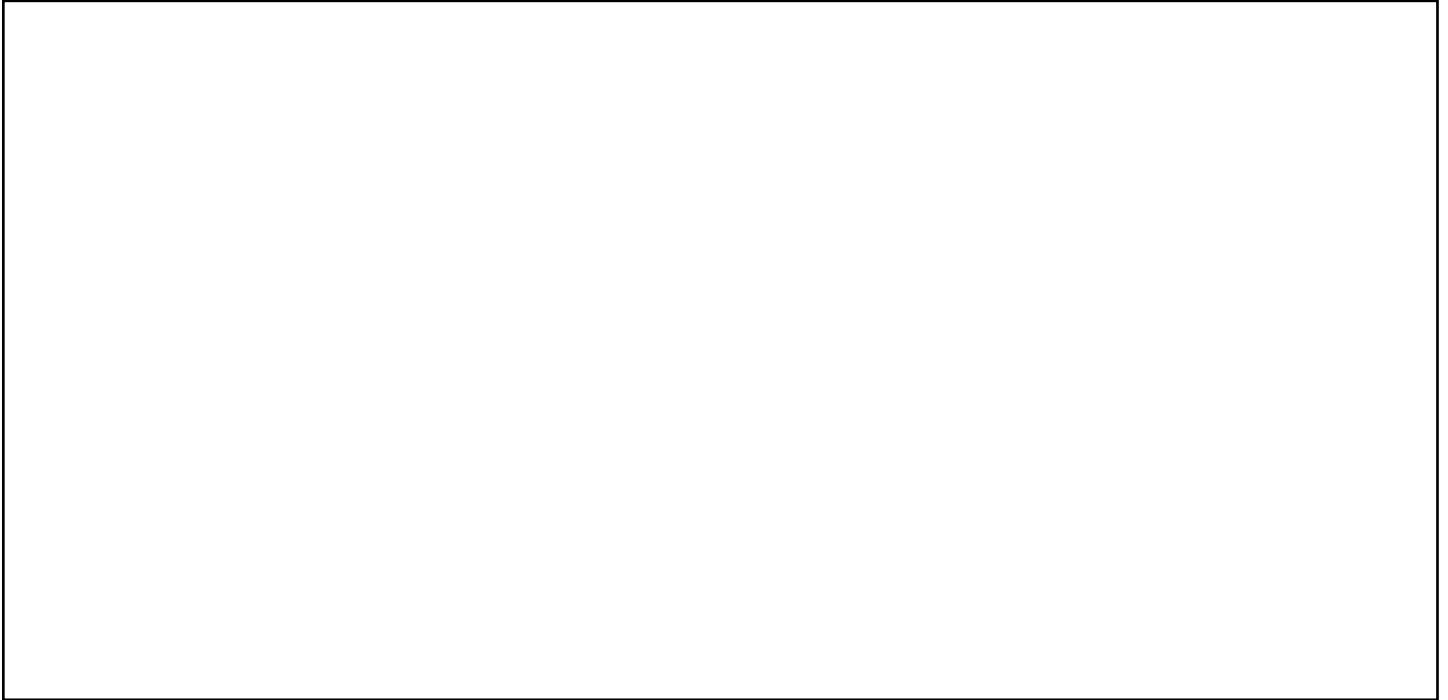
3. At night I sleep.

Name _____

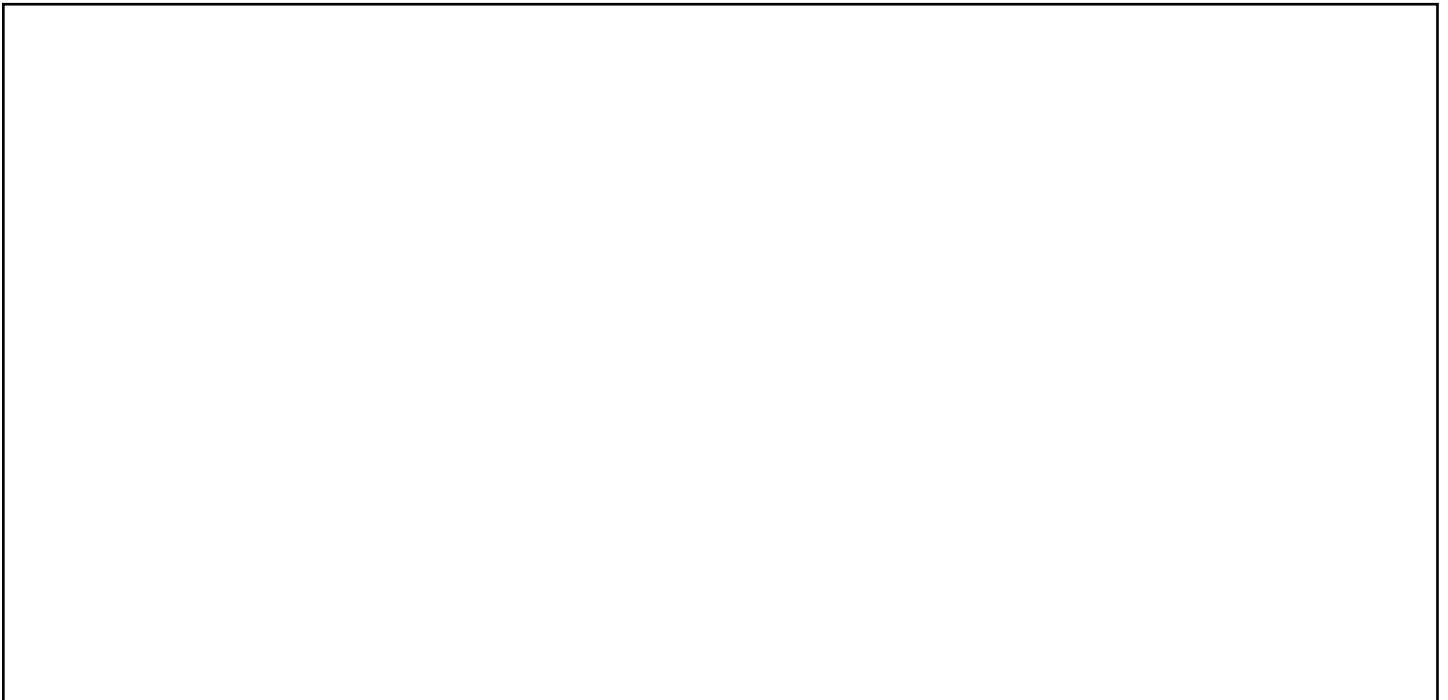
Date _____

SCIENCE: Day and Night

Draw what you do in the day.



Draw what you do at night.



Objective

- Students will describe the relationship between pictures and text.

Standard Supported

- **CCSS Reading Informational Text:** With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts). (K-7)

Resources

- Language Arts Master (page 13)

Summary

The red fox is a night animal that uses its senses in the dark. Follow a fox as it hears, sees, and smells different animals in a forest.

WORD WORK

Sight Words: *out, at, the, red, is, a, it, in, too, run, away, look, see, soon, will, be*

BUILD VOCABULARY AND CONCEPTS

- red fox
- raccoon
- barn owl
- skunk
- mouse
- senses

Students may know some of these animals. Have pictures available of each animal, and place the written name with each picture on a word wall. Pronounce each name for students. Ask students to give a thumbs up or a thumbs down to indicate if they do or do not know the name of each animal.

Let students know that you will be talking about senses the animals use. Talk about the five senses: seeing, hearing, tasting, smelling, touching/feeling. Discuss that we use our eyes to see, our ears to hear, our tongues to taste, our noses to smell, and our hands to touch/feel.

READ AND DISCUSS

Read the article “Out at Night” aloud to students as they follow along. You may want to read the entire article first, and then reread the article, taking time to stop and discuss each two-page spread.

Pages 14–15 Read the title and text. Say and ask: **Point to the red fox in the picture. What did we learn about the fox?** (*Students should point to the fox and say that it is a night animal. It uses its senses in the dark.*) **What did we say the senses are?** (*hearing, seeing, smelling, tasting, touching*)

Pages 16–17 Read the text. Ask: **What do the pictures on these pages show?** (*a fox, an owl, and a mouse*) **What does the text tell us about these animals?** (*The fox and the owl hear the mouse, but it runs away.*) **Why do you think the fox and the owl are interested in the mouse?** (*The mouse would be food for them, if they could catch it before it runs away.*)

Pages 18–19 Read the text. Ask: **What does the fox see?** (*It sees a raccoon biting a shell.*) **In what way are the pictures and text on these pages a good match?** (*We can see the fox’s eyes looking toward the raccoon, and we can see the raccoon biting a shell.*)

Pages 20–21 Read the text. Ask: **What does the picture show the fox doing?** (*sniffing at the ground*) **What sense is that, and what does the fox use to sniff?** (*smelling; nose*) **What does the fox smell?** (*a skunk!*)

Pages 22–23 Read the text. Ask: **When does the red fox sleep?** (*during the day*) **What does the small picture at the bottom of page 23 show?** (*the red fox sleeping*)

TALK AND WRITE

Students can respond to the article by talking and writing. Use the following prompts to guide them. You might also want to use the Language Arts Master for this article.

- **Talk about what you learned about the red fox.**
- **Draw something you learned about how the red fox uses its senses.**

Objective

- Students will learn that the red fox uses its senses when it comes out at night. With prompting and support, students will infer that the red fox uses its senses to look for food.

Standard Supported

- **NGSS LS1.C: Organization for Matter and Energy Flow in Organisms:** All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)

Resources

- Out at Night poster (Teacher's Edition)
- Science Master (page 14)

Science Background

There are many different animals that are active at night and sleep during the day. Animals that are active at night are called nocturnal. Nocturnal animals include foxes, owls, raccoons, coyotes, wolves, moths, crickets, and fireflies. Some nocturnal animals have good night vision, which allows them to easily spot prey. However, there are other nocturnal animals that do not see well at night. Animals that do not have good night vision use other senses, such as hearing and smelling, to find food at night.

ENGAGE

You might create a list of animals and have students say “day” or “night” to indicate if these animals are out during the day or at night. Here is a list you could start with. Add to this list, as students learn more about animals that come out at night.

- birds
- bats
- squirrels
- skunks
- moths
- opossum

EXPLORE

With students, pick one or more of the nocturnal animals to research. Find out when they come out at night, what they eat, and where they sleep.

EXPLAIN

Have students discuss what they learned about the red fox and how it uses its senses in the dark. You can use these sentence frames to guide the collaborative conversation.

- The red fox is an animal that comes out at _____. (*night*)
- The red fox uses its _____ in the dark. (*senses*)
- It listens and hears a _____. (*mouse*)
- A _____ hears the mouse, too. (*barn owl*)
- The red fox sees _____. (*a raccoon*)
- The raccoon is biting a _____. (*shell*)
- The red fox smells a _____. (*skunk*)
- The red fox _____ during the day. (*sleeps*)

Students might also want to explain what they know about these animals. It's likely they have encountered some of them. Many will be aware of the distinct smell of a skunk's spray. This might be a good time to talk about why and how the skunk uses the spray to fend off predators.

ELABORATE

You can use the Out At Night poster to show examples of animals that are active at night. As a class, you might want to research to find other nocturnal animals. You might want to explain to students that animals that are active at night are called nocturnal animals.

EVALUATE

Assess students' understanding with the Science Master for this article. You might also use the following prompts.

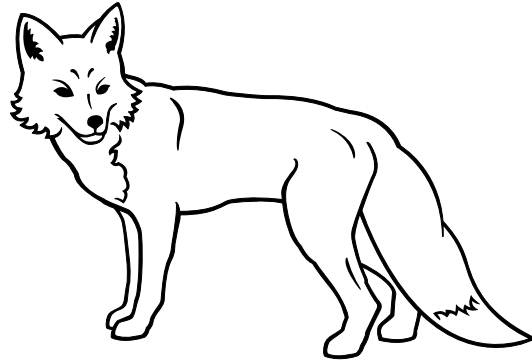
- **What does the red fox do at night?**
- **What other animals are out at night?**

LANGUAGE ARTS: Red Fox at Night

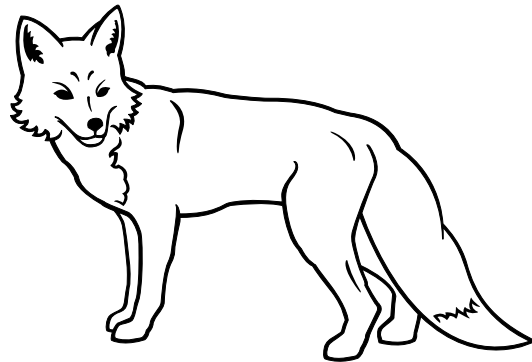
Trace the words.

Then circle what the fox uses to hear, see, and smell.

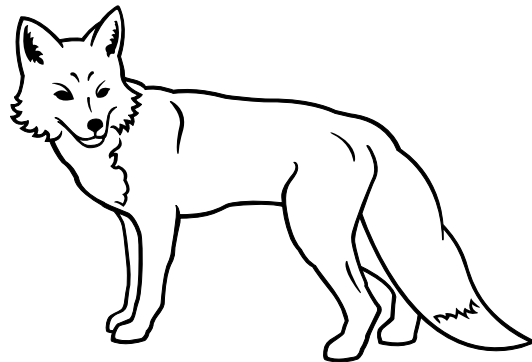
hear



see



smell

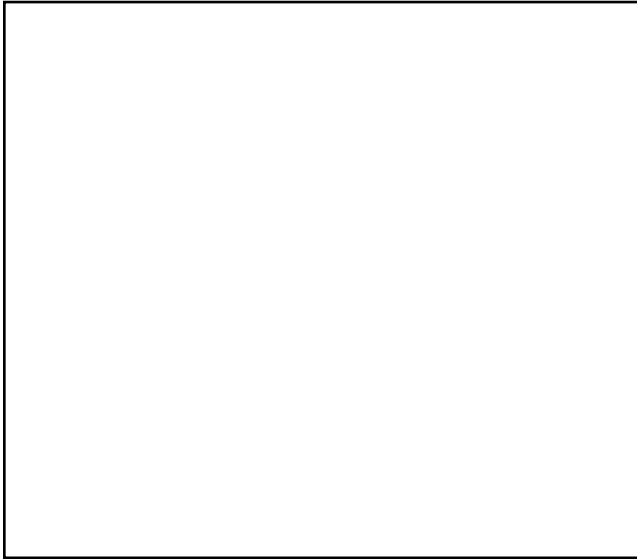


SCIENCE: Nocturnal Animal Facts

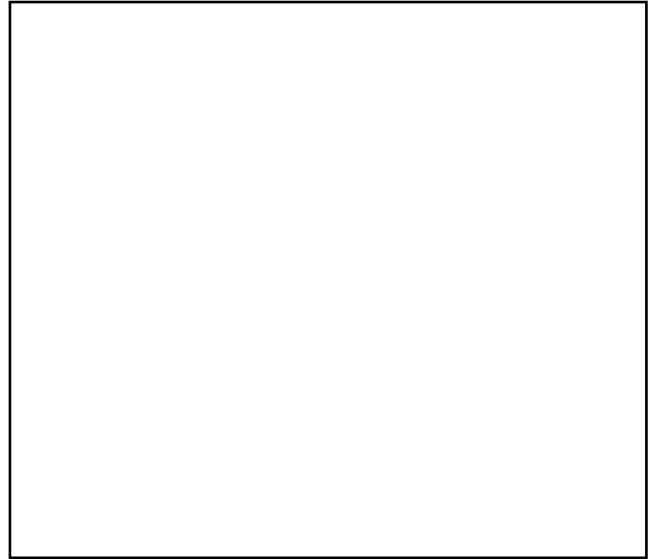
Tell about an animal that is active at night.

Name of animal: _____

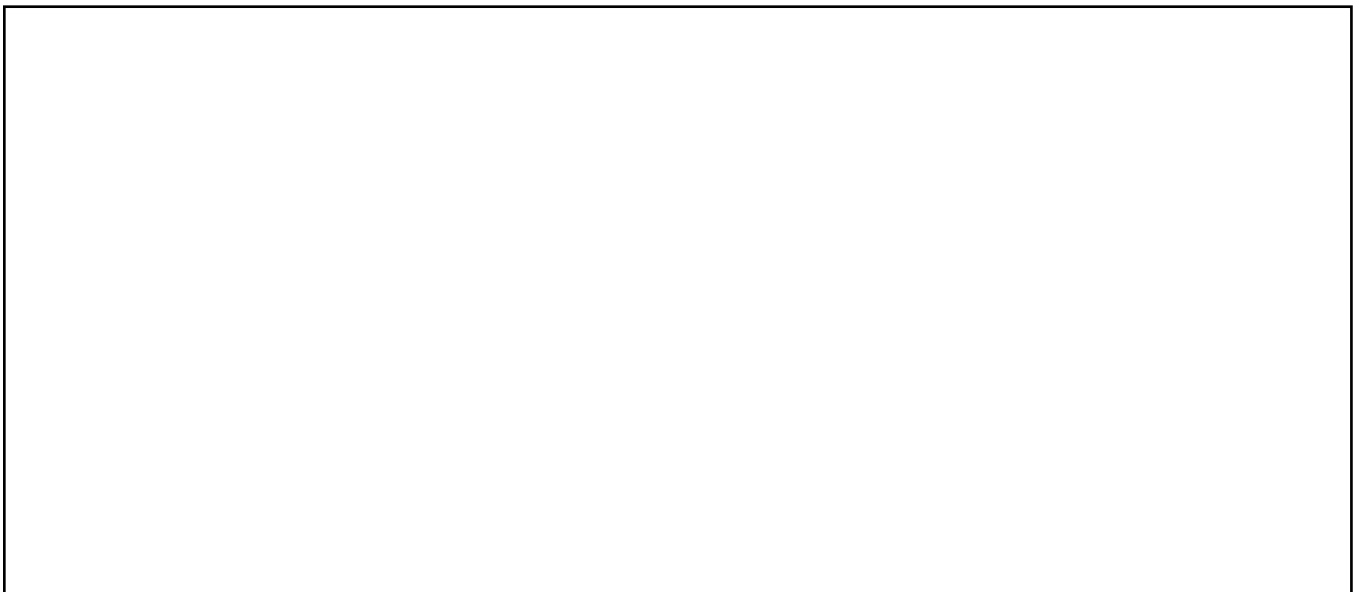
Picture of my animal



My animal's habitat



A sense my animal uses at night



Your Shadow

Language Arts: What Blocks the Sun?, page 5

Students should use the letters b, d, m, and t, to write the words: dog, tree, ball, me.

Science: Match Up, page 6

Students should match each dog to its shadow.

first dog > second shadow

second dog > third shadow

third dog > fourth shadow

fourth dog > first shadow

Day and Night

Language Arts: Circle the Letters, page 9

Students should draw a line to match the each lowercase letter to its capital letter. Then students should circle the first letter of each sentence and also the pronoun "I" in sentence 3.

1. The sky is dark. (*circle the "T" in "The"*)
2. It is night. (*circle the "I" in "It"*)
3. At night I sleep. (*circle the "A" in "At" and the pronoun "I"*)

Science: Day and Night, page 10

Students should draw what they do in the day and what they do at night.

Out at Night

Language Arts: Red Fox at Night, page 13

Students should trace the words "hear," "see," and "smell." Then students should circle the body part(s) that the fox uses to hear (ears), see (eyes), and smell (nose).

Science: Nocturnal Animal Facts, page 14

Students should write the name of a nocturnal animal and then draw a picture of it, its habitat, and one sense it uses at night.