In This Guide

In this guide, you will find language arts and science lessons for the stories in the May 2016 edition 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.

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Objectives
• Students will ask and answer questions about key details in a text.
• Students will draw, dictate, and write to give information about a topic.

Resources
• Vocabulary Assessment Master (page 4)

Summary
The fennec fox lives in the sunny, hot desert, but it is able to stay cool. The fox’s big ears let heat leave the body. The fox’s feet have fur, which protects them from the hot sand. The fox seeks shady, cooler spots. Trees block sunlight and provide shade. The fox also has a den that is underground, where sunlight doesn’t shine. At night, when the desert is cooler, the fox comes out of its den to hunt for food.

BUILD VOCABULARY AND CONCEPTS
• cool • sunlight
• heat • shade
• protect • den

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Read each of these words aloud and say: Some of these words go together. Let’s see if we can find the words that have something in common with one another. Point to the word “heat” and ask if there is a word on the list that is related to heat. Guide students to understand that sunlight provides heat. Then ask: What about “cool”? Is there a word that relates to cool? Guide students in a discussion about shade and how it provides a cooler spot on a sunny day. Then say: We are going to read about a fox that lives in the hot desert. A den is a fox’s home. It is underground. It keeps a fox cool and it protects it from the desert heat.

READ AND DISCUSS
A Fennec Fox Stays Cool in the Desert
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 as well as any other words that might be unfamiliar to them. Let students know they will be learning more about the fennec fox, a type of fox that lives in the desert.

Pages 2–3  Read the title and the text to students. Ask: What did we learn about the desert on these pages? (It is sunny. Sunlight heats the land.) What did we learn about the fox? (It stays cool.) Have students look at the picture and say: This is a picture of a fennec fox. What do you notice about it? (It has big ears). Then say: Let’s read on to see if we can find out why its ears are so big.

Pages 4–5  Ask: What did we find out about the fox’s big ears? (They help the fox stay cool.) How do the ears help the fox stay cool? (Heat leaves the fox’s body through its ears. This helps the fox stay cool.) Point to the inset picture on page 5 and say: Look closely at the fox’s feet. What did we find out about them? (They are furry and protect the fox’s feet from the hot sand.) Make sure students look closely at the picture to see that the fur is on the soles of the fox’s feet not just on top of its feet.

Pages 6–7  After reading the text on pages 6 and 7, ask: How else does the fox stay cool? (It looks for shade and goes in its den.) Ask students to point out the shade in the inset picture. Then have them to point to the den. Ask: What do you notice about the shade and the den? (The shade and the den are both dark. The sunlight isn’t shining there. The tree blocks the sun and provides shade. The den blocks the sunlight, too, because most of the den is under the ground.)

Pages 8–9  After reading the text on pages 8 and 9, ask: What do we find out about the desert at night? (It is cooler because there is no sunlight.) What does the fox do at night? (It comes out of its den and hunts for food.)

WRITE AND ASSESS
You can assess students’ understanding of the vocabulary words with the Vocabulary Assessment Master for this article. You may also want to assess students’ understanding of the article by having them draw, dictate, and write to give facts about the fennec fox.

• Draw, tell, or write one way the fox stays cool.
• Draw, tell, or write why the fox’s den is cool.
Let students know that the desert is a very sunny, hot place, and they will learn about how one animal, the fennec fox, stays cool in the desert where it lives.

**EXPLAIN**
Read the article to students.

After reading, have students explain and describe how the fennec fox is able to stay cool in the desert. Students should note all of the following:

- The fox has big ears that let heat leave its body.
- The fox has furry feet that protect them from the hot sand.
- The fox looks for shade that provides a cooler spot.
- The fox stays in its den when the sun is shining, because it’s cooler under the ground.
- The fox comes out of the den at night when it’s cooler.

**ELABORATE**
Share the Cool Ears poster with students to learn about other animals that have big ears that keep them cool. Like the fennec fox, the African elephant and the jackrabbit have oversized ears that help the animals stay cool. You might want to research these animals with students to find out where they live and other ways these animals stay cool in their environment.

**EVALUATE**
Assess students’ understanding with the Science Assessment Master for this article. You might also ask them the following questions:

- **How are the fox’s feet protected from the hot sand?** *(They have fur on them.)*
- **What happens when a tree blocks sunlight?** *(It provides shade.)*
ASSESS VOCABULARY: Staying Cool

Write about the fox. Use one or two words from the box.

heat  cool  sunlight  protect  shade

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________
ASSESS SCIENCE: Staying Cool

Circle the things in the pictures that help the fox stay cool.
Honeybees
LANGUAGE ARTS

Objectives
• Students will ask and answer questions about unknown words in a text.
• Students will understand and use verbs to retell key details from a text.

Resources
• Vocabulary Assessment Master (page 8)

Summary
Bees need food to live. They drink the nectar and eat the pollen from flowers. The pollen sticks to the bees as they are gathering nectar and pollen to bring back to their hive. They bring the nectar and pollen back to the hive to share with the other bees.

BUILD VOCABULARY AND CONCEPTS
• bee • nectar
• flower • pollen
• hive

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Do a picture walk through the article “Honeybees” and point out pictures of the vocabulary words to students.

READ AND DISCUSS
Bees Need Flowers
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 as well as any other words that might be unfamiliar to them. Let students know they will be learning more about bees and the food they need to live.

Pages 10–11  Read the title and text on page 11 to students. Say: The bees we will be reading about are a particular type of bee called honeybees. Bees, like all living things, need food to live. As we read on we will find out what they eat. Ask: Why do you think the text says "buzz with some bees"? [Students might know that "buzz" is a sound we associate with bees.] Ask students to buzz like bees. Say: If a bee flies next to your ear it sounds a little like the word "buzz," doesn’t it?

Pages 12–13  Ask: Where do bees find food to drink? [in flowers] What is the name of the liquid in flowers that bees drink? (nectar)

Pages 14–15  Ask: What else do flowers have that bees need? (pollen) What is pollen? (a dust) What do bees do with pollen? [They eat it, and they bring it and nectar to their hive.]

There are some verbs on page 15 that students may not be familiar with. Work with students to help them understand and use the verbs “sticks to” and “gather.” Ask: When something is sticky, what does it do? [It sticks to you; it’s hard to get it off.] Pollen is like that. When a bee gets near the pollen in a flower, the pollen sticks to the bee. That’s how a bee is able to gather pollen. Gather means to pick up or collect. Can you think of something you gather or pick up? Work with students to find a good example. One example might be that they gather their materials after art class and put them away.

Pages 16–17  Ask: What do bees do with the pollen and nectar when they bring it to their hive? [They share the food so all the bees get to eat.] You might want to use the following sentence frames to retell the article, asking students to provide the underlined verbs.

Bees need food to live.
Bees fly to flowers.
Bees drink nectar.
Bees eat pollen.
Pollen sticks to bees
Bees gather nectar and pollen.
Bees bring nectar and pollen to the hive.
Bees share their food.

WRITE AND ASSESS
You can assess students’ understanding of the vocabulary words with the Vocabulary Assessment Master for this article. You may also want to assess students’ understanding of the article by having them write about what they learned. Ask students to write or draw their answers to the following:

• Where do bees find food?
• What do bees eat and drink?
Objective
• Students will learn that bees need food to live and grow. They get food from flowers.

Resources
• Science Assessment Master [page 9]
• Honeybees IWB Lesson [website] (optional)

Science Background
A honeybee hive has three different classes of bees. There is only one queen bee in the hive. Her job is to lay the eggs that will become the hive’s next generation of bees. The workers are females that look for food (nectar and pollen). They also do other things around the hive, such as clean and protect it. Male bees are called drones. They live in the hive only during the spring and summer. In the winter, the workers and the queen cluster together into a ball to stay warm. In winter, the bees and the larvae feed on stores of honey and pollen. Come spring, there will be a new generation of bees in the hive.

EXPLORE
Discuss with students that people need food to live and grow. Ask: What kind of food do you eat to live and grow? Students will mention many kinds of food. Say: Animals need food to live and grow. Animals get food from plants or from other animals. Where do you think bees get their food? If students have looked at some of the pictures in the article, they may be able to infer that bees get their food from flowers. Say: As we read the article “Honeybees,” we will learn about bees and the food they need to live and grow.

EXPLAIN
Read the article to students.

After reading, have students share what they learned about honeybees and where they get their food and what they eat and drink to live and grow. Say: Let’s add more information to our web about bees. Then work with students to add information, such as the following sentences, to the web.

Bees get food from flowers.
Bees drink nectar.
Bees eat pollen.

ELABORATE
You might want to research with students more information about honeybees. You can start with the information in Science Background and share with students that there are three different classes of honeybees in a hive: the queen, workers, and drones. Let them know that the bees they see pictured in the article are the bees that gather food for the hive. They are called workers.

EVALUATE
Assess students’ understanding with the Science Assessment Master for this article. You might also ask them to do the following:

• What food do bees get from flowers? [nectar and pollen]
• Draw a bee getting food from a flower.
ASSESS VOCABULARY: Honeybees

Help the bee find the hive.

Honeybee Maze

Trace the words.

The bee eats nectar.

The bee eats pollen.

 bee: © IVANA36/SHUTTERSTOCK; beehive: NokHoOkNoi/Shutterstock
ASSESS SCIENCE: Honeybees

The bee is hungry. Draw where it can find food.
Objective
• Students will learn that some words imitate natural sounds.

Resources
• Vocabulary Assessment Master (page 12)

Summary
Rain is coming. If you listen you can hear the sound it makes as it starts to fall and hits the ground—drip drop. Raindrops fall from clouds. As the raindrops fall hard and fast, they come down with the sound of pitter pat. Puddles form. The raindrops fall in the puddles, making a plop, plop, plop sound. Then the rain slows down. These few drops make the sound plip plop. When the sun returns, the birds sing chirp, chirp.

BUILD VOCABULARY AND CONCEPTS
• raindrops
• clouds
• puddles

Introduce the vocabulary words to students by displaying them in the classroom on a word wall or on a board. Create an image bank by finding several print or online photos or illustrations for each word. Present each word along with the images for that word, giving students a chance to anchor the meaning in their minds. Guide students in crafting a definition for each word.

READ AND DISCUSS
The Sounds of a Rain Shower
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 as well as any other words that might be unfamiliar to them.

WRITE AND ASSESS
You can assess students’ understanding of the vocabulary words with the Vocabulary Assessment Master for this article. You may also want to assess students’ understanding of the article by having them write about what they learned. Ask students to write or draw their answers to the following:
• Draw something you might see in a rain shower.
• What other sounds might you hear when it rains?

Pages 20–21 Say: As raindrops fall harder and faster, they make a different sound—pitter pat, pitter pat. Ask students to make the pitter pat sound so they can see how it imitates raindrops falling harder and faster.

Say: When it rains hard and fast, sometimes puddles form on the ground. Look at the small picture on page 21. What’s happening there? [Raindrops are falling into the puddles.] When that happens, it sounds like plop, plop, plop. Let’s make that sound together.

Pages 22–23 Say: As the rain slows down, not as many raindrops fall. The rain goes plip plop, plip plop. Then the sun comes out and the birds sing. What sound do birds make? [chirp, chirp] Let students experiment with making those sounds, too. You might want to let them act out the sounds of the rain shower again from its gentle start to the sunny end when the birds sing.
Objectives

- Students will identify that rain showers have a beginning and an end.
- Students will learn that scientists use different ways to study the world.

Resources

- Let’s Make a Rainstorm poster (Teacher’s Edition)
- Science Assessment Master (page 13)

Science Background

Rain showers can happen suddenly. They offer a great opportunity for young scientists to study the natural world by using all of their senses to experience the world around them. Scientists use different ways to study the world, and your students can, too.

ENGAGE

Engage students by letting them know that they are going to act as scientists today. They are going to use their senses to experience something. Review with students the senses of seeing, hearing, touching, tasting, and smelling.

EXPLORE

Ask students if they have ever been caught in a rain shower. Ask: Have you ever been outside when it suddenly started to rain? Let’s talk about what that was like as a scientist might, using our senses.

- What did you see?
- What did you hear?
- What did you feel?
- What did you smell?
- Maybe some raindrops fell in your mouth. What did they taste like?

Let students know that scientists observe the world around them, and they use different ways to study the world.

EXPLAIN

Read the article to students.

After reading, work with students to identify how a rain shower begins, continues on, and then ends. Ask: What happens at each part of a rain shower? How does it look and sound at each part? (The rain shower starts slowly and sounds like drip drop. Then raindrops fall harder and faster and puddles form. These sounds are pitter pat and plop. Then the rain slows down with a plip plop sound of the drops.)

ELABORATE

Use the Let’s Make a Rainstorm poster to create a rainstorm using the whole class and sounds they make with their hands. This may take some time and practice. You may want to be the leader. Follow the directions on the poster.

EVALUATE

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

- Where do raindrops fall from? [clouds]
- What forms on the ground when rain falls hard and fast? [puddles]
ASSESS VOCABULARY: Drip Drop

Trace each word.
Then write each word.

d r i p

d r o p

p a t

p i t t e r

p l i p

p l o p

c h i r p
ASSESS SCIENCE: Drip Drop

Write the numbers 1, 2, 3 to put the pictures in order.

- The sun comes out.
- The rain starts to fall.
- Raindrops fall hard and fast.
Staying Cool
Assess Vocabulary, page 4
Students should write about the fox using at least one of the following words: heat, cool, sunlight, protect, shade.

Assess Science, page 5
Students should circle the fox’s ear(s), feet, den, and the shade under the tree.

Honeybees
Assess Vocabulary, page 8
Students should draw a line through the maze correctly from the bee to the flower. Students should correctly trace the words nectar and pollen.

Assess Science, page 9
Students’ should draw a flower.

Drip Drop
Assess Vocabulary, page 12
Students should trace each word and then write each word.

1. drip
2. drop
3. pat
4. pitter
5. plip
6. plop
7. chirp

Assess Science, page 13
Students should write the numbers to put the pictures in order.
The sun comes out. → 3
The rain starts to fall. → 1
Raindrops fall hard and fast. → 2