In This Guide
In this guide, you will find language arts and science lessons for the stories in the September 2016 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, to find additional resources for extending your students’ learning.

Your Subscription Includes:
• Magazines  • Classroom Posters  • Projectable Magazine
• Interactive Whiteboard Lesson  • Teacher’s Guide  • Interactive Edition
  (additional subscription required)
Explore

LANGUAGE ARTS

Objectives
- Students will recognize and name uppercase E and lowercase e.
- Students will understand the question word where.

Resources
- Language Arts Master (page 4)

Summary
The world is a big place to explore. Look around, up, and down to find out more.

WORD WORK
Sight Words: the, is, a, big, up, down, find
High-Frequency Words: look

BUILD VOCABULARY AND CONCEPTS
- explore
- world
- high
- below

The words above are used in the article and may be new to students. Use the following routine to introduce the words to students. Go through the routine, one word at a time. Pronounce the word. Have students pronounce the word. Ask students if they know the word. They can respond with a thumbs up or a thumbs down. Define each word, using student-friendly language. Post the word on a word wall. Tell students they will be adding more information about each word, such as drawings, photos, descriptions, and definitions, as they learn more. After reading, as a class, you may want to add information about each word to the word wall.

E is for Explore
Work with students to recognize and identify the uppercase E in “Explore” in the headline on pages 2–3. Ask students to identify the uppercase E as well as the two examples of a lowercase e at the beginning of the words on page 7. You might want them to write and trace upper- and lowercase Ee in the Language Arts Master for this article.

READ AND DISCUSS
Read the article “Explore” 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.

When you read and discuss the article, have students look carefully at the pictures on each of the pages. Ask them to describe what they see in the pictures. Discuss with students how the pictures relate to the text on the pages.

Explain to students that good readers ask questions. Some questions begin with the word where. The answers to questions that begin with the word where tell about places. To practice understanding the question word where and to have students retell parts of the article, ask students the following questions while showing them the pictures and the text on pages 4–5:
- Where can we look to explore? (up high)
- Where is the man? (climbing a tree)
- Where can we look to explore? (down below)
- Where is the woman? (swimming in the sea)

TALK AND WRITE
Students can respond to the article by talking and writing. Use the following prompts to guide them.
- Talk about something new you learned.
- Draw what you learned about exploring.
Explore
SCIENCE

Objective
• Students will understand that scientists use different ways to study the world.

Resources
• Meet Some Explorers poster (Teacher’s Edition)
• Science Master (page 5)

Science Background
Explorers are people who look at something in a careful way. They learn about things and places in the world around them. The explorers in this article study the natural world. Alizé Carrère studies places and living things, such as lemurs in Madagascar. Stephen Sillett explores giant trees and the plants and animals that live in the tops of them. Sylvia Earle is an ocean explorer. She works to protect the ocean. Explorer Paul Sereno studies the past by searching in the ground for evidence of plants and animals that lived long ago.

ENGAGE
Engage students in a discussion about the word explore. What do they think of when they hear that word. Ask: What do you like to explore? Some students might mention they like to explore outside. They might enjoy looking at different insects or critters they are fascinated with. Others might say you can explore just about anything you are interested in. Exploring helps you find out more about something.

EXPLORE
Help students understand more about what it means to explore. Ask: Do you use your eyes when you explore? Guide students in a discussion about how looking and seeing are related to exploring. Ask: How do you use your eyes when you explore? Discuss with students that looking carefully and observing what we see around us is a wonderful way to explore our world. Encourage them to look more closely at something they see every day to see if they notice anything new that they hadn’t observed before. For example, they could look more closely at the classroom to see if there is something in the room they might not have noticed before. Give students a few minutes to observe and then share what they noticed with the class or a partner.

EXPLAIN
Read the article to students.

After reading, ask students to be explorers and use their observation skills to look again at the photos in the article and explain how each one shows exploring.

Pages 2–3 Students should note that the animal [a lemur] is sitting on the explorer’s shoulders. They may not know what kind of animal it is, but they will most likely note that it is not one that lives near them. They might also mention that the area is filled with trees. They might say that the animal could live in those trees.

Page 4 Students should mention that the explorer is climbing a large tree. It looks as if it could be dangerous, but the explorer seems skilled at climbing and has the equipment to do it safely. The picture shows him exploring up high in trees.

Page 5 Students will probably mention that this explorer is in the ocean. Again, this explorer has the equipment to explore safely. She wears a diving suit and mask and has an oxygen tank so she can breathe underwater. The explorer is reaching her hands out to a dolphin.

Pages 6–7 Students should mention that this explorer is digging in the sand to uncover something. It looks like bones. He is using a small brush as a tool in his work.

ELABORATE
Share the Meet Some Explorers poster with students. Read the information to students to help them find out more about each explorer.

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

• Which explorer would you like to explore with? Why?
• Tell what you might find while exploring.

Objective
• Students will understand that scientists use different ways to study the world.

Science Background
Explorers are people who look at something in a careful way. They learn about things and places in the world around them. The explorers in this article study the natural world. Alizé Carrère studies places and living things, such as lemurs in Madagascar. Stephen Sillett explores giant trees and the plants and animals that live in the tops of them. Sylvia Earle is an ocean explorer. She works to protect the ocean. Explorer Paul Sereno studies the past by searching in the ground for evidence of plants and animals that lived long ago.
TRACE THE LETTERS.

Trace the letters.

E E E E E

e e e e e

Copy the letters.

E

e

Circle the letters E and e.

Explore, explore, explore!
Where can you explore? Draw what you might find.
A Place for Pandas

**Language Arts**

**Objectives**
- Students will ask and answer questions about key details in the text.
- Students will describe the relationship between photographs and the text.

**Resources**
- Language Arts Master (page 9)

**Summary**
Red pandas live in forests. Red pandas get what they need in a forest habitat. Red pandas need air, water, food, and shelter to live. Red pandas eat bamboo. They find a safe place to sleep in the forest trees.

**Word Work**
There are many high frequency words used in the article “A Place for Pandas.” You might want to create two flashcards for each of the following high frequency words used in the article. Lay the cards face down and have students take turns turning over two of the cards. The goal is to find the matching pairs. Continue with the game until students find all of the matching pairs.

**Sight Words:** in, a, what, eat, is, good, for

**High-Frequency Words:** red panda

**Build Vocabulary and Concepts**
- forest
- need
- air
- water
- food
- tree

The words above are used in the article and may be new to students. Use the following routine to introduce the words to students. Go through the routine, one word at a time. Pronounce the word. Have students pronounce the word. Ask students if they know the word. They can respond with a thumbs up or a thumbs down. Define each word, using student-friendly language. Post the word on a word wall. Tell students they will be adding more information about each word, such as drawings, photos, descriptions, and definitions, as they learn more. After reading, as a class, you may want to add information about each word to the word wall.

**Read and Discuss**
Read the article “A Place for Pandas” 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.

When you read and discuss the article, focus on some of these questions for each two-page spread.

**Pages 8–9**
Read the title aloud to students. Ask: What is a good place for pandas? (a forest) Why is a forest a good place for pandas? (A forest has what red pandas need.)

**Pages 10–11**
Ask: What two things do these pages tell us red pandas need? (air and water) Where do red pandas find water? Use the photograph to help you. (in a pond)

**Pages 12–13**
Ask: What else do red pandas need? (food) What kind of food do red pandas eat? (bamboo)

**Pages 14–15**
Ask: What else do red pandas need? (a safe place) Where can they find a safe place? (in trees) Finish by asking students to retell the article by answering the question “Why is the forest a good place for red pandas?” (Red pandas get what they need in the forest. They get air, water, food, and a safe place.)

**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 something new you learned.
- Draw what you learned about red pandas.
A Place for Pandas

**SCIENCE**

**Objectives**
- Students will identify where red pandas get what they need to survive.
- Students will describe what red pandas need to survive.

**Resources**
- Red Pandas poster (Teacher’s Edition)
- Science Master (page 10)

**Science Background**

Red pandas are living things. They need air, water, food, and shelter, or a safe place. Red pandas get what they need from their habitat. They live in high altitude forests in parts of Asia. The forests that are suitable for red pandas are those with bamboo understories. Bamboo makes up a large percentage of the red pandas’ diet.

**EXPLAIN**

Read the article to students.

After reading, have students explain and describe what red pandas need to live and where they get those things. Students should note all of the following:

- Red pandas need air.
- Red pandas need water.
- Red pandas need food.
- Red pandas need shelter.
- Red pandas get what they need to survive in forests.

To further explain what students learned in the article, ask the following questions. Some of these questions will require inference. Students can use the photos to help make these inferences.

- What kind of food do red pandas eat? (bamboo)
- Where do they find bamboo? (in the forests they live in)
- Where do red pandas find a safe place? (in the trees)
- Why do red pandas need a safe place? (to sleep, to avoid other animals who might want to harm them)

**ENGAGE**

Engage students in a discussion about what people need to live. Ask: *What do you need every day?* Guide students to come up with the following things that we all need every day:

- We need to eat food.
- We need to drink water.
- We need to breathe air.
- We need a place to live or a place to stay safe.

**EXPLORE**

Explore further the ideas discussed in the Engage section. Ask: *Do any of you have pets? Do you think they need food, water, air, and a safe place? (Students should respond that pets need these things, too.)* Ask students to elaborate on where their pets get those things. Then ask: *What about the animals we see outside, such as squirrels, rabbits, and chipmunks? Do they need these things, too? (yes)* Explore with students the kinds of food wild animals find to eat and where they might find water and a safe place to rest at night or during the day.

**ELABORATE**

Share the Red Pandas poster with students. Point out on the map where the red pandas live. Then point out on the map where students live. Ask students to share with a partner what they learned about the red panda. Ask: *What surprised you most about the red panda?* Ask students to share their answers to this question with the class.

**EVALUATE**

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

- What does a red panda eat?
- Draw where a red panda stays safe.
EXPLAIN
If possible, have a globe available for students to examine, or point to the globe on the back page of the magazine. Say: This is a globe. Ask: How are the globe and the photograph the same? (They both show Earth, land, and water.) Ask: How are the globe and the photograph different? (The photograph is a real picture of Earth. The globe is a model of Earth.) Guide students to understand that a globe is a round map, or model of Earth. Explain that since a globe is the same shape as Earth, it is one of the best ways to look at Earth.

Show students a world map or the flat map on the back page of the magazine. Explain to students that another way to view Earth is on a world map. Ask: How are the globe and the world map the same? (They show what Earth looks like. They both show land and water.) Ask: How are the globe and the world map different? (The globe is round. You have to turn it to see all of Earth. The world map is flat. It shows all of Earth at once.)

Explain to students that, while globes look more like Earth, a flat map of Earth is helpful, too. Flat maps can show us all of Earth at once. Point out on the map Asia (where red pandas live). Then point out on the map North America. Compare the map to a globe. Show that you must turn the globe to look at those two continents.

ELABORATE
Explain that Earth is made of continents and oceans. There are seven continents. Asia is one of the continents. It is where red pandas can be found in the wild.

EVALUATE
Assess students’ understanding with the following prompts.

• Which is more like Earth, a globe or a world map?
  Why?
• If you wanted to see the whole world at once, would you look at a globe or a world map?

Internet Link
For more teacher resources about teaching map skills to elementary students, visit the National Geographic website at: http://nationalgeographic.org/education/map-skills-elementary-students/.
Who eats bamboo?
SCIENCE: What Red Pandas Need

Trace the words.

Red pandas need ________ air ________.

Red pandas need ________ water ________.

Red pandas need ________ food ________.

Draw a red panda in a safe place.
Finding Food

LANGUAGE ARTS

Objective
• Students will describe the relationship between photographs and text.

Resources
• Language Arts Master (page 13)

Summary
Birds need food. Some birds find food on other animals. An egret finds food on a hippo’s back. A plover finds food between a crocodile’s teeth. An oxpecker finds food in an impala’s ear.

WORD WORK
Sight Words: see, where, find, it, the, on, eat, in, this
High-Frequency Words: bird

BUILD VOCABULARY AND CONCEPTS
• bird
• bug
• food

The words above are used in the article and may be new to students. Use the following routine to introduce the words to students. Go through the routine, one word at a time. Pronounce the word. Have students pronounce the word. Ask students if they know the word. They can respond with a thumbs up or a thumbs down. Define each word, using student-friendly language. Post the word on a word wall. Tell students they will be adding more information about each word, such as drawings, photos, descriptions, and definitions, as they learn more. After reading, as a class, you may want to add information about each word to the word wall.

READ AND DISCUSS
Read the article “Finding Food” 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.

When you read and discuss the article, have students look carefully at the pictures on each of the pages. Ask them to describe what they see in the pictures and discuss with them how the pictures relate to the text on the pages.

Pages 16–17 Ask: Where are the birds? (on the large animal’s head) Read the text on page 17 to students and ask: What do you think the birds are looking for? (food)

Pages 18–19 Have students look at the picture and ask: Where are the birds standing? (on the hippo’s back) Ask: Where do the birds find bugs on the hippo? (on its back)

Pages 20–21 Have students look at the picture as you read the text. Ask: Why is the bird in the crocodile’s mouth? (It is eating the bits of food in the crocodile’s teeth)

Pages 22–23 Remind students of the picture and text on pages 16–17. Let them know that the animals in this picture show the same kinds of animals. Ask: What do the birds find to eat in the impala’s ear? (bugs)

Students may notice that the impala on pages 16–17 has horns and the one on pages 22–23 does not. Let students know that male impalas have horns but female impalas do not.

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 something new you learned from a picture.
• Draw what you learned about where birds find food.
**EXPLAIN**

Read the article to students.

After reading, ask students to explain why birds need food (to live and grow) Then ask them to identify the ways in which some animals help birds find the food they need to live and grow. You might ask them to fill in the blanks in the statements below:

- Birds eat bugs on a hippo’s _________.
- Birds eat food in a crocodile’s _________.
- Birds eat bugs in an impala’s _________.

You could also have students match pictures of the birds to the animals that help them find food. Find and label pictures of each animal and have students match up the animal pairs.

hippo — egret
crocodile — plover
impala — oxpecker

**ELABORATE**

With students, search for more information about each of these bird and animal relationships so students can learn how the birds eating food off of the animals helps those animals. This will also help students understand why the hippo, crocodile, and impala don’t harm the birds while they are on its back, in its mouth, or in its ear.

**EVALUATE**

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

- Where do some birds find food?
- Draw where one bird finds food.

**Science Background**

Birds need food to live and grow. Some animals help other animals meet this need to find food in a relationship that is mutually beneficial. In “Finding Food” the examples shown are of birds finding food on the bodies of other animals. This provides food for the birds, but it also helps the other animals by ridding them of things like lice, ticks, flies, dead skin, and ear wax.

**Objectives**

- Students will understand that birds need food.
- Students will identify how other animals help birds meet their need to find food.

**Resources**

- Science Master (page 14)
The bird looks for food.

Draw what happens next.
SCIENCE: Help the Birds

Draw a line to match the bird to the animal.
**Find Food**

A Bird Looks for Food, page 13
Students should draw the bird finding food in a crocodile’s mouth.

Help the Birds, page 14
Students draw a line from each bird to the animal that helps it find food.

- egret → hippo
- oxpecker → impala
- plover → crocodile

---

**Explore**

E is for Explore page 4
Students should trace the letters, copy the letters, and circle the letters E and e.

Be an Explorer, page 5
Students should draw a picture of where they can explore and what they might find.

**A Place for Pandas**

Connect the Dots, page 9
Students should connect the dots to reveal the red panda.

What Red Pandas Need, page 10
Students should trace the words air, water, and food. Students should draw a red panda safe in a tree.