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 Voyager.

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.

Voyager
The Voyager edition is written for first grade readers. All articles in the Voyager edition have been measured using the Lexile® Framework for Reading. Some articles will be easier to read than others, though all articles will be within the 190-400L range.

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
- Teacher’s Guide
- Interactive Edition (additional subscription required)
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 “A Habitat is a Home.”

MINDSET OF AN EXPLORER

KEY FOCUS AREAS

A ——— Attitudes

National Geographic kids are:
CURIOS 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.

S ——— 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.

K ——— 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.
A Habitat Is a Home

OBJECTIVES

• Students will know and use text features to locate information.
• Students will ask and answer questions about key details in a text.

RESOURCES

• Language Arts Master (page 5)

SUMMARY

Animals live and grow in different places, such as mountains, rain forests, deserts, oceans, and prairies. These places are called habitats. Animals get what they need in their habitat.

WORD WORK

Sight Words: live, let, an, of

BUILD VOCABULARY AND CONCEPTS

• habitat
• mountain
• rain forest
• desert
• ocean
• prairie

You might want to create a display on your word wall. Place the heading “Habitat = Home.” Under the heading, post pictures of each type of habitat. Label each habitat. Discuss the pictures with students and name each habitat as you talk about it. Let students know that they will be learning about animals that live in these habitats.

As students learn about each habitat and the animals and plants that live there, you can add pictures, labels, and student writing and drawings to the appropriate habitats on the word wall.

READ AND DISCUSS

Before reading, familiarize students with the structure of Young Explorer magazine. Point out the table of contents, which appears on the front cover. Let students know there are three articles in the magazine. Explain that the table of contents lets us know on which page each article begins. Ask students to find the first article on page 2.

Read the article “A Habitat Is a Home” 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 2–3 Read the title and the text aloud to students. After reading say: Look at the picture of the mountain and the two small pictures of the animals. Why are these animals pictured here? (because they live in the mountains) Continue by saying: The mountain is their home. What is another name for an animal’s home? (habitat)

Point to the small pictures again. Tell students the text by the pictures lets us know what animals they are. Ask: What are the animals? (mountain lion and mountain goat)

Pages 4–5 Read the text. Ask: What is it like in a rain forest? (It rains a lot, and the trees grow tall.) What are two animals that live there? (tree frog and toucan) What does the text say those animals do? (A frog sits on a leaf. A toucan looks for fruit.)

Pages 6–7 Read the text. Ask: What is it like in a desert? (Little rain falls. It is a dry place.) What are two animals that live there? (gila woodpecker and lizard) What does the text say those animals do? (A woodpecker lives in a cactus. A lizard warms itself in the sun.)

Pages 8–9 Read the text. Ask: What is it like in an ocean? (Many animals live in the ocean.) What are two animals that live there? (sea turtle and seahorse) What does the text say those animals do? (A sea turtle swims. A seahorse looks for food.)

Pages 10–11 Read the text. Ask: What is it like in a prairie? (Flowers and tall grasses grow there.) What are two animals that live there? (grasshopper and prairie dog) What does the text say those animals do? (A grasshopper rests on a flower. A prairie dog chews on a plant.)

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 one of the habitats you learned about.
• Draw or write something you learned about an animal that lives in one of the habitats.
A Habitat Is a Home

SCIENCE

Objective
- Students will learn that plants and animals normally live or grow in a natural home called a habitat.

Resources
- Science Master (page 6)

Science Background
There are different habitats in the world, and they are home to many different plants and animals. The plants and animals that live in these habitats are well-suited, or have adapted, to living there. The habitats provide these plants and animals with the things they need to survive—air, water, food, and space or shelter.

ENGAGE
To build background to the concept of a habitat being a home, discuss with students what a home is to people. Say: Let’s talk about what a home is. Write the word “Home” on a board or chart paper. Discuss with students what a home is. Ask: What do you do at home? Write down the answers students give. If students haven’t mentioned that they live, eat, and sleep at home, be sure to ask questions that can lead to those answers.

EXPAND
To begin to connect home to habitat, say: Plants and animals have homes, too. They are called habitats. Habitats are places where plants and animals live and grow. What are some of the things animals need to live and grow? Think about wild animals you see, such as rabbits, birds, and squirrels. What do you think they need to live and grow? (food to eat, water to drink, air to breathe, a place to sleep and stay safe)

EXPLAIN
Read the article to students.

After reading, have students look at the pictures on each two-page spread and discuss the habitats and the animals pictured.

- Pages 2–3: Say: Describe the mountain habitat. (The mountain habitat is high. It looks like the highest mountain in the background has snow on it. The part of a mountain we see in the front of the picture has trees and flowers.) What are two animals that live in this mountain habitat? (mountain lion and mountain goat)
- Pages 4–5: Say: What do you see in the rain forest habitat? (There are many trees, water, and a waterfall) Why is the rain forest habitat a good home for a tree frog and a toucan? (There are many trees in the rain forest. A tree frog can sit on leaves, and a toucan can find fruit to eat.)
- Pages 6–7: Say: What do you see in the desert habitat? (Mountains are in the background. There are also many cactuses, rocks, and other plants or grasses.) Why is the desert habitat a good home for a gila woodpecker and a lizard? (A woodpecker can live in a cactus, and a lizard has plenty of sun to warm itself.)
- Pages 8–9: Say: What do you see in the ocean habitat? (There are water, fish, and coral in the ocean. Students may not know what coral is; point out the coral in the photo.) Why is the ocean habitat a good home for a sea turtle and a seahorse? (They have water to swim in and food to eat.)
- Pages 10–11: Say: What do you see in the prairie habitat? (The prairie has flat land with lots of tall grasses and flowers.) Why is the prairie habitat a good home for a grasshopper and a prairie dog? (A grasshopper has plenty of flowers to rest on; a prairie dog has plants to eat.)

ELABORATE
As a whole class, choose one of the habitats to explore further. Research other plants and animals that live and grow in that habitat.

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

- What is a habitat? Describe one of the habitats you read about.
- What animals live in that habitat?
Match the habitat with an animal that lives there.

- Ocean
- Desert
- Mountain
- Prairie
- Rain forest
SCIENCE: Color a Tree Frog

Use the numbers to color the tree frog.

Color Key
1 — Orange
2 — Dark green
3 — Light green
4 — Blue
5 — Red

Write about a tree frog’s habitat.
Great Pumpkins

Summary
Pumpkins grow from seeds planted in the spring. Over time the seeds sprout; then in summer, a vine with flowers grows. The flowers turn into pumpkins that change from green to orange. The pumpkins are ready to pick in the fall.

WORD WORK
Sight Words: how, some, then

BUILD VOCABULARY AND CONCEPTS
- pumpkin
- grow
- seed
- sprout
- vine
- flower

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 “Great Pumpkins” 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 12–13 Read the title and text on pages 12 and 13. Ask: Where is the pumpkin in the picture? (The pumpkin is the large, orange, round item that the boy is lying on.) What does the text tell us we will learn about in this article? (We will find out how pumpkins grow.)

Pages 14–15 Read the text. Ask: What part of the text tells what the picture at the top of page 14 shows? (First, you plant some pumpkin seeds.) Ask: What new information does the text tell us about planting seeds? (The best time to plant seeds is in the spring.) What does the picture at the bottom of the page show? (a seed sprouting)

Ask students to describe how the pictures at the top of page 15 show what the text says. (The pictures at the top show a vine with flowers and a green pumpkin. The text tells us that a vine with flowers grows in summer, and the flowers turn into green pumpkins.) Then ask: What does the picture at the bottom of page 15 show? (an orange pumpkin) What else does the text tell us? (that the pumpkins turn orange in the fall and are ready to pick)

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 you learned about growing pumpkins.
- Draw or write something you learned about how pumpkins grow.
Great Pumpkins

SCIENCE

Objectives
- Students will learn that pumpkins grow from pumpkin seeds.

Resources
- Four Seasons poster (Teacher’s Edition)
- Science Master (page 10)

EXPLORE
You might want to explore more about pumpkins, finding out where in the United States pumpkins are grown, how big pumpkins can get, and what kinds of recipes include pumpkin. Most students will be familiar with pumpkin pie, but there are many other recipes that can include pumpkin as an ingredient.

EXPLAIN
Read the article to students.

With students you can create a life cycle diagram with pictures and labels that show the different stages in the life cycle.
- pumpkin seed
- pumpkin sprout
- pumpkin vine
- pumpkin vine with yellow flower
- pumpkin vine with green pumpkin
- pumpkin vine with mature, orange pumpkin

ELABORATE
There are many different plants that grow from seed. Find and discuss other foods students are familiar with that are grown from seed, such as the following:
- beans
- tomatoes
- watermelon
- cucumbers

You can use the Four Seasons poster to show when many seeds can be planted (spring); when most of the plant growth occurs (summer); and when many fruits and vegetables are harvested (fall).

EXTEND
You may want to experiment with growing some plants from seed to show how they grow and change.

EVALUATE
Assess students’ understanding with the Science Master for this article. You might also use the following prompts.
- How does a pumpkin grow?
- What is your favorite thing to do with a pumpkin?

Science Background
A pumpkin, like many plants, grows from a seed. The seed is planted in the ground, generally in the spring, and will begin to sprout. In the summer, if the plant has plenty of light, water, and space to grow, the sprout will grow into a vine. Then the vine grows yellow flowers. From the flowers, small green pumpkins can develop. The pumpkins will grow larger and eventually turn orange. Inside the mature pumpkins are seeds. These seeds can be planted, and the cycle can begin again.

ENGAGE
Engage students by tapping into their background knowledge. Many will have visited pumpkin patches in the fall or have participated in or watched pumpkins being carved for Halloween. Have students talk about their experiences. You might want to ask one or more of the following questions to get the discussion started.

- Who has visited a pumpkin patch? What did you see there?
- Were the pumpkins still growing on their vines? What did that look like?
- Has anyone ever seen a pumpkin being carved for Halloween? What do the insides of a pumpkin look like?
- Are there seeds inside a pumpkin? What do they look like?
- Do you know what you can do with pumpkin seeds? (Some students may mention that you can eat pumpkin seeds.)

NEXT GENERATION SCIENCE STANDARDS
1-LS1-1 Structure and Function All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

Science Background
A pumpkin, like many plants, grows from a seed. The seed is planted in the ground, generally in the spring, and will begin to sprout. In the summer, if the plant has plenty of light, water, and space to grow, the sprout will grow into a vine. Then the vine grows yellow flowers. From the flowers, small green pumpkins can develop. The pumpkins will grow larger and eventually turn orange. Inside the mature pumpkins are seeds. These seeds can be planted, and the cycle can begin again.
Connect the dots to complete the pumpkins in the pumpkin patch.
Then write about the pumpkins.
SCIENCE: Pumpkin Life Cycle

Draw pictures to show the life cycle of a pumpkin.

- Seed
- Sprout
- Vine
- Vine with yellow flower
- Vine with green pumpkin
- Vine with orange pumpkin
Swimming with Dolphins

LANGUAGE ARTS

Objectives
• Students will identify the main topic and retell key details of a text.

Resources
• Language Arts Master [page 13]

Summary
Dolphins live in the ocean. They get everything they need there. Dolphins need water, food, and air. The ocean is their habitat.

WORD WORK
Sight Words: let, live, open, of, has, live

BUILD VOCABULARY AND CONCEPTS
• dolphin • eat
• ocean • chase
• swim • catch
• sleep • breathe

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 “Swimming with Dolphins” and point out pictures that will help students understand the vocabulary words. Let students know that in each picture the dolphins are in the ocean.

Many of the vocabulary words are verbs: swim, sleep, eat, chase, catch, and breathe. Have partners or small groups act out what each of these words means. Let students know that dolphins do all of these things (except breathing) under the water.

Discuss that the ocean is the dolphins’ habitat, and in the ocean they get everything they need.

READ AND DISCUSS
Read the article “Swimming with Dolphins” 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 16–17 Read the text. Ask: Where are the dolphins? [They are in the water.] What are we going to find out about dolphins? [We are going to find out where they live.]

Pages 18–19 Read the text. Ask: Where does a dolphin live? [It lives in the ocean.] What does a dolphin get in the ocean? [It gets everything it needs.] Guide students to understand that this is the main topic of the article. It is what the article is mainly about—A dolphin lives in the ocean, and it gets what it needs in the ocean.

Begin a discussion of what a dolphin needs. Ask: What is one thing a dolphin needs? [It needs water.] What does a dolphin do in the water? [It swims, plays, and sleeps there.] What is one fun fact we found out about how a dolphin sleeps? [It sleeps with one eye open.]


Pages 22–23 Read the text. Ask: What else do dolphins need? [They need air.] How do dolphins breathe air? [They swim to the top of the water and breathe air in through their blowholes.]

Talk with students about why the ocean is a good habitat for dolphins. Ask students to retell what dolphins need and how they get what they need in the ocean.

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 you learned about dolphins.
• Draw or write something a dolphin does in the ocean.
Swimming with Dolphins

Objective
• Students will learn that dolphins need water, air, and food to live and grow.

Resources
• Dolphin Time poster (Teacher’s Edition)
• Science Master (page 14)

EXPLAIN
Read the article to students.

After reading, have students turn and talk with a partner to tell what they learned about dolphins. Then together, as a class, list the things dolphins need and are able to get in their ocean habitat.

• Dolphins need water.
• Dolphins need food.
• Dolphins need air.

Have students talk about each of these needs. Ask students to tell more about why dolphins need water, food, and air and how the ocean habitat helps dolphins get what they need. Remind students to look at the pictures in the article to help them remember.

ELABORATE
Use the Dolphin Time poster to find out more about what dolphins do in their ocean habitat. Read aloud the text on the poster to students. You might also have students act out each piece of information.

• Jump! Students can mimic dolphins jumping out of the water and landing with a splash.
• Swim! Students can pretend they are dolphins swimming in groups.
• Talk! Student can make clicking, whistling, and squeaking sounds, as dolphins do when they talk to each other.
• Play! Students can play like dolphins and imagine they are blowing bubbles and chasing them.

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

• What are some things dolphins need?
• What are some other things dolphins do in the ocean?
LANGUANGE ARTS: Drawing Dolphins

Draw dolphins in their ocean habitat. Write about the dolphins.
SCIENCE: Catch the Fish

Help the dolphin catch the fish.

Why does the dolphin want to catch the fish?

A  for fun
B  for food
C  to breathe
**A Habitat Is a Home**

Language Arts: Match Habitats to Animals, page 5
Students should draw lines to match each habitat to an animal.

- ocean > sea turtle
- desert > lizard
- mountain > mountain lion
- prairie > prairie dog
- rain forest > tree frog

**Science: Color a Tree Frog, page 6**
Students should use the color key to color the tree frog. Students should write facts about a rain forest.

**Great Pumpkins**

Language Arts: Pumpkin Patch, page 9
Students should connect the dots to complete the pumpkins. Then students should write about the pumpkins.

Science: Pumpkin Life Cycle, page 10
Students should draw pictures to complete the pumpkin life cycle diagram.

- seed > sprout > vine > vine with yellow flower > vine with green pumpkin > vine with orange pumpkin

**Swimming with Dolphins**

Language Arts: Drawing Dolphins, page 13
Students should draw dolphins in their ocean habitat and then write about the dolphins.

Science: Catch the Fish, page 14
Students should draw a line through the path in the maze that connects the dolphin to the fish. Then students should answer the question.

Why does the dolphin want to catch the fish? (B) for food