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, to find additional resources for extending your students’ learning.
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 “Push to Move.”

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.
**Standards Supported**
- **CCSS Reading Informational Text:** With prompting and support, ask and answer questions about key details in a text. (K-1)
- **CCSS Speaking and Listening:** Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood. (K-2)

**Resources**
- Language Arts Master (page 5)

**Summary**
The arctic hare and the short-tailed weasel have fur that changes color with the seasons. Their fur is brown in the summer, begins to change in the fall, and is white in the winter. The weasel hunts for hare to eat. The fur color helps the hare to hide and the weasel to sneak up on the hare.

**WORD WORK**

**Sight Words:** this, is, a, in, the, like, help, it, too, can, be, to, see, look, for, eat

**BUILD VOCABULARY AND CONCEPTS**
- hare  •  white
- weasel  •  summer
- fur  •  fall
- brown  •  winter

Introduce the vocabulary words by displaying them in the classroom on a word wall or on a board. Show students pictures that match the words’ meanings. You might want to use the following sentence frames to initiate discussion, using the words.

- This animal is called a ________.
- It has _____ that covers its body.
- Its fur is ________.
- ________ is a season.

**READ AND DISCUSS**
Read the article “Hide, Hare!” 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: **The title is “Hide, Hare! Why do you think the hare would need to hide?”** [The weasel looks for hares to eat.] Continue by asking: **The text says in the summer the hare’s fur is brown. How might that help it hide?** [The ground is brown, too. That helps the hare blend in with the ground and makes it harder for the weasel to see the hare.] **What do we find out about the weasel’s fur?** [It is brown, too.] **What does the text tell us about that?** [It can be hard to see the weasel, too.] **Do you think that means that it would be easier for the weasel to sneak up on the hare without the hare seeing him?** [yes] You might want to point out and read the labels that tell the type of hare and weasel shown in the pictures.

**Pages 4–5**
Read the text. Ask: **What happens to the air in the fall?** [The air gets cooler.] **Look at the pictures. The text says the hare and the weasel begin to change. How are they changing?** [Their fur is changing color.] Have students compare the pictures of the hare and the weasel on pages 4–5 with the pictures on pages 2–3 and discuss the changes they see.

**Pages 6–7**
Read the text. Ask: **What color is the fur of the hare and weasel in winter?** [white] **What else is white in winter?** [snow] **How does blending in with the snow help the hare and the weasel?** [It helps the hare blend in, or hide, but it also might help the weasel sneak up on the hare.] **What does the text say the hare should do?** [Run!]

**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 hare and the weasel.
- Draw something you learned about the hare and the weasel.
**Objective**
- Students will learn that some animals color changes with the seasons.

**Standard Supported**
- **NGSS Cross Cutting Concepts: Patterns:** Patterns in the natural world and human designed world can be observed and used as evidence. (K-LS1-1)

**Resources**
- Blending In poster (Teacher’s Edition)
- Science Master (page 6)

**Science Background**
Some animals, such as polar bears and snowy owls, have white fur all year round. However, there are other animals whose fur changes as the seasons change. Two of those animals, the arctic hare and the short-tailed weasel, are featured in the article “Hide, Hare!” This change in fur color most certainly helps the animals blend into their environment, but there may also be other advantages to snowy-white winter coats. One idea is that the white coats may provide properties for keeping animals warm, or better insulated, in winter. A few other animals besides those featured in the article that also have fur or feathers that change with the seasons are the Peary caribou, collared lemming, ptarmigan, and arctic fox.

**ENGAGE**
Engage students in a discussion about one of the concepts in this article. Talk with them about the advantages an animal in the wild might have by being able to blend in with its surroundings. Ask if they have ever been outside and been surprised by a bug that blends in with the grass, dirt, or flowers. You might show them a few pictures of insects, such as different types of mantis, katydids, and grasshoppers. Let students know that this is called camouflage.

**EXPLORE**
Expand on the idea of the advantages of camouflage by exploring the concept of predator and prey. Let students know that animals in the wild need to find food to eat. Some animals eat plants, others eat other animals, and some eat both plants and animals. Discuss how camouflage might help both predator and prey.

**EXPLAIN**
After reading, have students turn and talk with a partner to tell what they learned about the hare and the weasel and how their fur changes with the seasons.

You might have students divide into three groups, with each group responsible for digging more deeply into one of the seasons to talk about what they learned and to describe what they observe in the pictures.
- Group 1: Have students look carefully at the pictures on pages 2–3 to observe, describe, and explain what the hare and the weasel and their surroundings look like in the summer.
- Group 2: Have students look carefully at the pictures on pages 4–5 to observe, describe, and explain what the hare and the weasel and their surroundings look like in the fall.
- Group 3: Have students look carefully at the pictures on pages 6–7 to observe, describe, and explain what the hare and the weasel and their surroundings look like in the winter.

Then have students in each group share what they discussed with the whole class.

**ELABORATE**
You can use the Blending In poster to show other examples of animals that can blend into their environment. Read the text aloud. You might have partners work together to find the animal in each picture.

**EVALUATE**
Assess students’ understanding with the Science Master for this article. You might also use the following prompts.
- What color are the hare and the weasel in the summer?
- What color are the hare and the weasel in the winter?
LANGUAGE ARTS: Words to Explore

1. Cut out the words. Say each word aloud.
2. Match each word to a picture in the story.
3. Match each word to the word in the story.

brown
winter
weasel
fall

hare
white
summer
SCIENCE: Hide in a Habitat

Draw an animal that uses camouflage.

Draw a habitat it can hide in.
Objective
• Students will describe the connection between the ideas in a text.

Standard Supported
• CCSS Reading Informational Text: With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. (K-3)

Resources
• Language Arts Master [page 9]

Summary
Robots show how a push is a force that can move things.

WORD WORK
Sight Words: they, can, a, is, it, away, the, blue, red, down, run, on, white, what

BUILD VOCABULARY AND CONCEPTS
• robot
• push
• force
• move

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 “Push to Move” and point out pictures that will help students understand the words.

• Point out the robots.
• Let students know that each robot is showing a push.
• Explain that a push is a force that moves something forward or away.

You might want students to act out different pushes or mimic what the robots are doing in the article.

READ AND DISCUSS
Read the article “Push to Move” 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. Let students know that the title tells us what a push does. Then ask: What does a push do? [It moves things.] What else did we learn about a push? [A push is a force.]


Pages 12–13 Read the text. Ask students to show and tell what happens when Orange-bot runs. Ask: What does Orange-bot push to run? [It pushes its feet on the ground to move fast.] Ask: What is White-bot’s push called? [a kick] What does the kick do to the ball? [It moves the ball away.]

The question at the end of the article asks what other things the robots could push. Have students turn and talk with a partner about other things the robots could push. Then have partners share their ideas with the class.

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 a push.
• Draw something you learned about how a push can move things.
**Push to Move**

**SCIENCE**

**Objective**
- Students will understand that pushing an object can start it (make it move/put it in motion).

**Standard Supported**
- NGSS PS2.A: Forces and Motion: Pushes and pulls can have different strengths and directions. (K-PS2-1), (K-PS2-2); Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (K-PS2-1), (K-PS2-2)

**Resources**
- Science Master (page 10)

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**Science Background**

Things don’t move on their own. A force is needed to make them move. Pushes and pulls are forces, and pushes and pulls have different strengths. They can be hard or soft, depending on the amount of force that is exerted. Pushes move things forward or away from you, and pulls move one thing toward another. Pushes and pulls can slow things down, stop them, or speed them up. They can also make things that are in motion change direction. Think about what happens to a soccer ball throughout a game. The soccer ball often gets rerouted in the course of a game, as players kick (push) the ball across the field.

**ENGAGE**

If students are familiar with pushing in their desk or table chairs, ask students to use their chairs to show what a push is. Let them know that there are many other pushes we do every day.

**EXPLORE**

With students, brainstorm common examples of things we push. You can use the following examples to get started.

- pushing shopping carts in the grocery store
- pushing a car door shut when you get out of the car
- pushing away from the table to get up out of your chair
- pushing/kicking balls in various sports (volleyball, soccer, basketball, etc.)
- walking, running, and jumping

**EXPLAIN**

Ask students to explain what they learned about pushes in the article “Push to Move.” Have them work with a partner, taking turns telling what each two-page spread of the article explains about pushes. They can use the pictures to guide them.

- A push is a force that moves things.
- A push moves something away.
- When you push a door it moves. Green-bot pushes the door to shut it.
- You can push things down, like the button Blue-bot pushes to stop a game.
- You push your feet on the ground to run. Orange-bot runs fast.
- You can push a ball by kicking it. White-bot kicks a ball to move it away.

**ELABORATE**

Extend Your Thinking About Pushes

Divide the class into pairs. Give each pair 10 dominoes or blocks of identical size. Instruct students to line up their blocks, as they are on the back page of the magazine. Then tell them to gently push the first one. What happens? (The second block falls, causing other blocks to subsequently fall.) If not all blocks fell, have students brainstorm ideas about why.

Then vary the experiment to test how distance between blocks affects the results:

- Space the blocks far apart. What happens? (Only the first block falls. It is too far away to touch the next block.)
- Space the blocks close together. What happens? (The blocks touch and push each other sooner. This makes them fall faster.)
- Put all of the blocks together. Have students make one long chain. Can they make all of the blocks fall? If not, was distance between the blocks the reason? Have students reset the blocks and try again.

**EVALUATE**

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

- What happens when you push a door?
- What happens when you kick a ball?
LANGUAGE ARTS: P is for Push

Trace and write the letters.

P P P

p p p

Trace and write the word.

push

Draw a push.
SCIENCE: Help the Robots Push

Color the correct arrow.
A World Map

LANGUAGE ARTS & SOCIAL STUDIES

Objective
- Students will ask and answer questions about unknown words in a text.
- Students will identify continents on a map.

Standards Supported
- CCSS Reading Informational Text: With prompting and support, ask and answer questions about unknown words in a text. (K–4)
- D2.Geo.3.K-2. Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

Resources
- A World Map poster (Teacher’s Edition)
- Language Arts and Social Studies Master (page 12)

Summary
A world map is a flat picture of Earth that shows land, water, and the continents.

WORD WORK
Sight Words: this, is, a, it, and, the, do, you, on

BUILD VOCABULARY AND CONCEPTS
- map
- Earth
- land
- water
- ocean
- continent

The words above are used to talk about maps and the things you find on them. You might want to display the world map poster that is included with the Teacher’s Edition of this magazine to discuss these words. Let students know that the world map you have displayed is a flat picture of Earth. Point out the land and water. Let students know that the large land masses are called continents and the blue area is ocean. The oceans are not labeled in the article, but they are on the world map poster.

READ AND DISCUSS
Read the article “A World Map” 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. Ask: What did we find out a world map is? (It is a flat picture of Earth.) What does it show? (Earth’s land and water) This map shows the continents. What is a continent? (It’s a large body of land.)

Spend some time exploring the map with students.

- Point out the labels of the continents. Read aloud the names of each continent.
- Ask students to count the number of continents. Say: There are seven continents on Earth.
- Show students that each of the continents has a different color. Tell them that helps us know the amount of land that makes up each continent.
- Show students the continent they live on. Tell them the name of the continent.

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 and Social Studies Master for this article.

- Talk about what you learned about a world map.
- Draw something you learned about a world map.
Color the continents green. Color the oceans blue. Circle the name of the continent you live on.
Objective
- Students will describe the relationship between maps 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 15)

Summary
Different animals live in different places around the world. Cranes live in Africa near rivers. Tamarins live in South America in the rain forest. Tigers live in Asia in forests and grasslands. Kangaroos live in Australia in grasslands.

WORD WORK
Sight Words: the, on, one, in, they, this, it, a, there, are, to, is, eat, and

BUILD VOCABULARY AND CONCEPTS
- crane
- tamarin
- tiger
- kangaroo
- Africa
- South America
- Asia
- Australia

The words above are used in the article “Animals Around the World.” Have pictures of the animals available for students to see, or do a picture walk through the article to point out the animals. Also display the world map poster that shows the names of the continents.

Post the words and pictures on a classroom word wall. Refer to the word wall throughout discussion of the article, and, as you read and learn about the different animals, place their names and/or pictures on the continents they live on.

READ AND DISCUSS
Read the article “Animals Around the World” 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: What are these animals? (cranes) Point to the label. Read it and let students know that the cranes are called gray crowned cranes. Ask: Where do the cranes live? (in Africa near rivers) Find Africa on the map. How do you know that is Africa? (It is in a different color than the other continents.) Also discuss how the small map is the same and different from the map in the article “A World Map.”

Pages 18–19 Read the text. Ask: What is this animal? (tamarin) Point to the label. Read it and let students know that the tamarin is called a golden lion tamarin. Ask: Where does it live? (in South America in a rain forest) Why is a rain forest a good place for a tamarin? (There are trees to climb and fruit to eat.) Find South America on the map. How do you know that is South America? (It is in a different color than the other continents.)

Pages 20–21 Read the text. Ask: What are these animals? (tigers) Point to the label. Read it and let students know that the tigers are called Bengal tigers. Ask: Where do they live? (in Asia in forests and grasslands) Why are forests and grasslands a good place for tigers? (There are cool spots to sit in and grass to hide in.) Find Asia on the map. How do you know that is Asia? (It is in a different color than the other continents.)

Pages 22–23 Read the text. Ask: What are these animals? (kangaroos) Point to the label. Read it and let students know that these kangaroos are called eastern grey kangaroos. Ask: Where do they live? (in Australia in grasslands) Why are grasslands a good place for kangaroos? (There is lots of land to hop on and grass to eat.) Find Australia on the map. How do you know that is Australia? (It is in a different color than the other continents.)

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 an animal you learned about.
- Draw something you learned about one of the animals.
Animals Around the World

SOCIAL STUDIES

Objective
• Students will learn about animals and the places they live around the world.

Standard Supported
• D2.Geo.3.K-2. Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

Resources
• A World Map poster (Teacher’s Edition)
• Social Studies Master (page 16)

Social Studies Background
This year, National Geography Awareness Week is November 12–18, 2017. You can find out more information at www.nationalgeographic.org/education/programs/geographyawarenessweek/about. You can also find mapping resources to use in your classroom at www.nationalgeographic.org/education/mapping.

ENGAGE
Engage students by talking about wild animals found in their area of the world. Let them know that many different kinds of animals are found in other areas of the world.

EXPLORE
If you and your students have already talked about the article “A World Map” and have looked at the world map poster, your students should be familiar with the different continents. On the world map poster, point out Africa, South America, Asia, and Australia. Let students know you will be learning about animals that live on those continents. Point out the continent on which you live, and trace the distance between your continent and the ones on which the animals live.

EXPLAIN
Ask students to explain what they learned about different animals that are found around the world. As a class, review the different animals and point out on the map where each animal lives.

• The cranes live near rivers in Africa.
• The tamarin lives in a rain forest in South America.
• The tigers live in forests and grasslands in Asia.
• The kangaroos live in grasslands in Australia.

You might have students draw pictures of the different animals and place them on the world map poster on the appropriate continent.

ELABORATE
As a class, you might want to research animals found on other continents or find more animals that are found in Africa, South America, Asia, and Australia. You could also ask students to name different animals and together you can find out the continent(s) on which those animals live.

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

• What do tamarins eat?
• What do tigers do in the grass?
LANGUAGE ARTS: My Favorite Animal

Draw a picture of your favorite animal from the story.

Write about it.
SOCIAL STUDIES: The Right Place

Cut out the animals. Glue each animal on the right continent.

- Bengal tiger
- Crowned crane
- Lion
- Tamarin
- Kangaroo
**ANSWER KEY**

**Hide, Hare!**

**Language Arts: Words to Explore, page 5**
Students should cut out the words and say each word aloud. Then students should match each word to a picture in the story and match each word to the word in the story.

**Science: Hide in a Habitat, page 6**
 Students should draw an animal that uses camouflage and a habitat it can hide in.

**Push to Move**

**Language Arts: P is for Push, page 9**
Students should trace and write the lowercase and uppercase letters and the word “push.” Then students should draw a push.

**Science: Help the Robots Push, page 10**
Students should color the correct arrow that shows the direction the robot needs to push.

**A World Map**

**Language Arts and Social Studies: Our World, page 12**
Students should color in the continents and oceans and circle the name of the continent they live on.

**Animals Around the World**

**Language Arts: My Favorite Animal, page 15**
Students should draw their favorite animal from “Animals Around the World” and write about it.

**Social Studies: The Right Place, page 16**
Students should cut out each animal and place or glue each animal on the continent where it lives.