

TEACHER'S GUIDE



Scout (Kindergarten) Vol. 16 No. 5

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/explormag-resources, to find additional resources for extending your students' learning.

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LANGUAGE ARTS

Objective

- Students will identify the main topic and retell key details in a text.

Resources

- Language Arts Master (page 4)

Summary

A mother grizzly bear takes care of her cubs. She protects them, finds safe places for them, and teaches them what they need to know to live and grow.

WORD WORK

Sight Words: *a, she, are, looks, out, for, finds, in they, can run, and, play, here, to, get, what, helps, up*

BUILD VOCABULARY AND CONCEPTS

- **mother bear**
- **cub**
- **protect**
- **safe**

The words above are used in the article and may be new to students. Pronounce the words for students.

Have students work with a partner. Give each pair one of the following sets of words written on index cards.

mother bear, cub
protect, safe

Ask students to talk about the words and discuss how the words relate to each other. Then have students come together as a class to share their thinking. Correct any misconceptions students might have about the words and their meanings and how the word pairs relate to each other.

READ AND DISCUSS

Read the article “Grizzly Bear Family” 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 aloud to students. After reading the title say: **Look at the picture of the grizzly bear family. What can you tell me about this bear family?** (*Accept reasonable responses, such as there are 3 bears in this picture; there are 2 baby bears/cubs and 1 adult. They look like they are playing in tall grass.*)

Say: **Lets find out more about this grizzly bear family.** Then read the text on page 2. Ask: **What did we find out about the large bear?** (*It is a mother bear.*) **What are baby bears called?** (*cubs*) **What does a mother bear do?** (*takes care of her cubs*) Help students understand that this is the main topic of the article and that as you read on, you will find out more details about how a mother bear takes care of her cubs.

Pages 4–5 Read the text on pages 4 and 5. Point out the definition of *protect* on page 4. Then ask: **What are some ways a mother bear takes care of her cubs?** (*She looks out for danger and keeps the cubs safe by her side. She finds safe places where the cubs can run and play.*)

Remind students of the main topic: A mother bear takes care of her cubs. You might want to write the main topic on chart paper or the board. Ask students to tell you again the details you learned on pages 4–5. Then write those under the main topic.

Pages 6–7 Read the text on these pages and ask: **What are some other details we learn on these pages about how a mother bear takes care of her cubs?** (*A mother bear feeds her cubs. She teaches them how to get food.*) Sum up the lesson by guiding students to understand that a mother bear helps her cubs get what they need to live and grow.

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 a grizzly bear family.**
- **Write or draw something you learned about a mother bear.**

SCIENCE

Objective

- Students will understand what animals need to live and grow.

Resources

- Science Master (page 5)

Science Background

Grizzly bears are a type of North American brown bear. The average life span of grizzly bears is 25 years. They are large mammals of about 5 to 8 feet in length and around 800 pounds.

The name “grizzly” comes from the word *grizzled*, which means gray or partly gray hair. The grizzly bear’s brown fur can look white or gray at the tips, or “grizzled.”

Grizzly bears are mostly solitary animals, except for the females and their cubs. Brown bears hibernate in the winter and the females give birth during this time, often to twins.

ENGAGE

To engage students, spend time looking for pictures of animal families, including bears. Discuss with students what makes up the animal families in the various pictures. Ask: **How many babies and adults are in this animal family?** Also discuss what the young and adult animals are doing in the pictures. Many times pictures show young animals playing with one another.

EXPLORE

Continue to use the pictures as a source of reference for students as you explore what animals might need to live and grow. You might ask some of the following questions:

- **What do you think the baby animals need to live and grow?**
- **Do they need food?**
- **Do they need water?**
- **Do they need a safe place to live?**

You might find out from students if they know what some of the animals in the pictures eat and the safe places they might find to live, such as in a den, a nest, or the hollow of a tree.

EXPLAIN

Read the article to students.

After reading, have students discuss what bears need to live and grow and how the mother bear helps them. Say: **A mother bear looks out for danger. The cubs are safe by her side.** Ask: **Why do you think the cubs are safe by her side?** It will take some inference on the students’ part to answer this question. Guide them in understanding that if the cubs are close by, the mother bear can lead them away from danger. It is easier to protect them when they are close by. Then say: **But cubs need to run and play.** **How does the mother bear help them do this?** (*She finds safe places for the cubs to run and play.*)

Say: **The cubs need to eat to live and grow.** Ask: **How does the mother bear help them with this?** (*She feeds her cubs and shows them how to get food and teaches them how to fish and find berries.*)

ELABORATE

Research with students other types of bears. Find pictures and discuss how these bears are similar to or different from the grizzly bear. Find out where these bears live and what they need to live and grow. Some other bears you might research are listed below:

- Sun Bear
- Black Bear
- Polar Bear
- Moon Bear

EVALUATE

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

- **What do grizzly bear cubs need to live and grow?**
- **What things do the cubs learn from the mother bear?**

LANGUAGE ARTS: Main Idea and Details

Circle the main idea. Draw the details.

Circle the main idea.

1. A mother bear helps her cubs live.

2. A mother bear is brown.

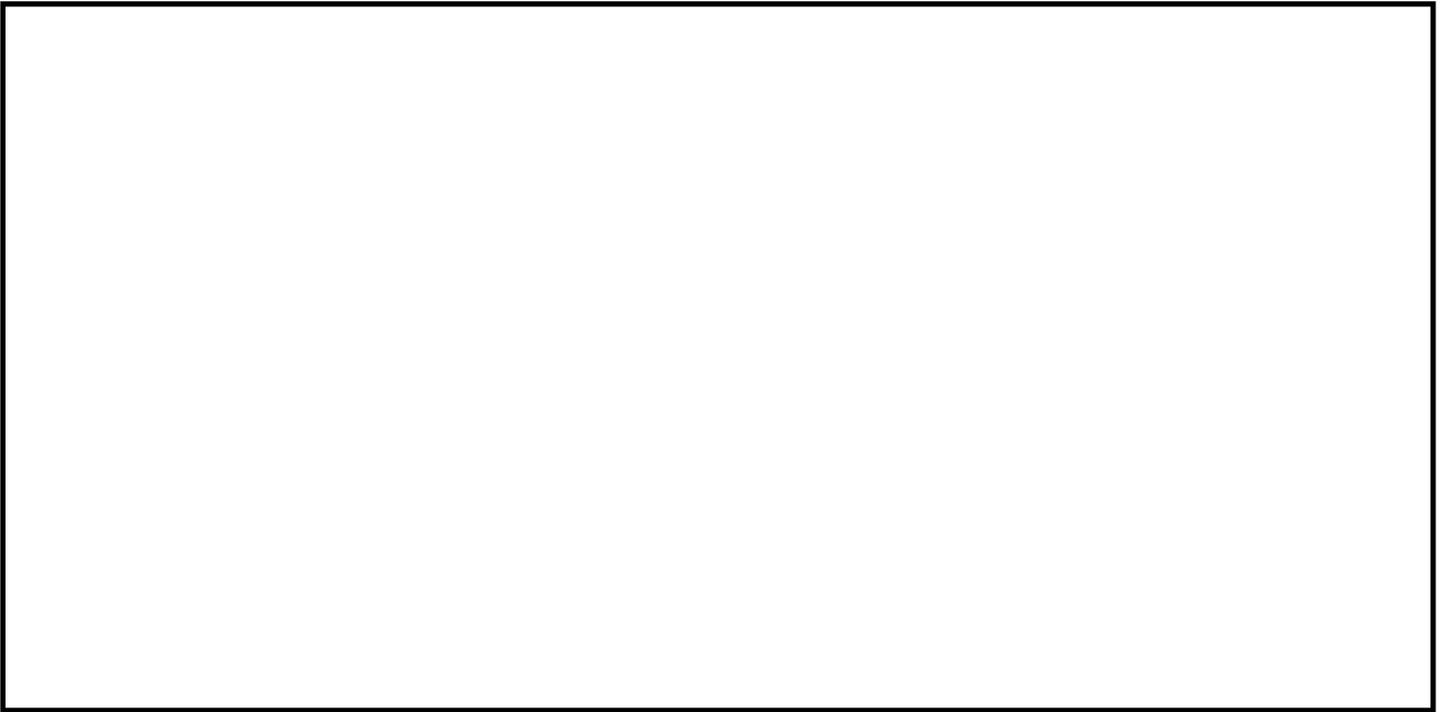
Draw this detail: A mother bear protects her cubs.

Draw this detail: A mother bear helps her cubs find food.

SCIENCE: What do cubs need?

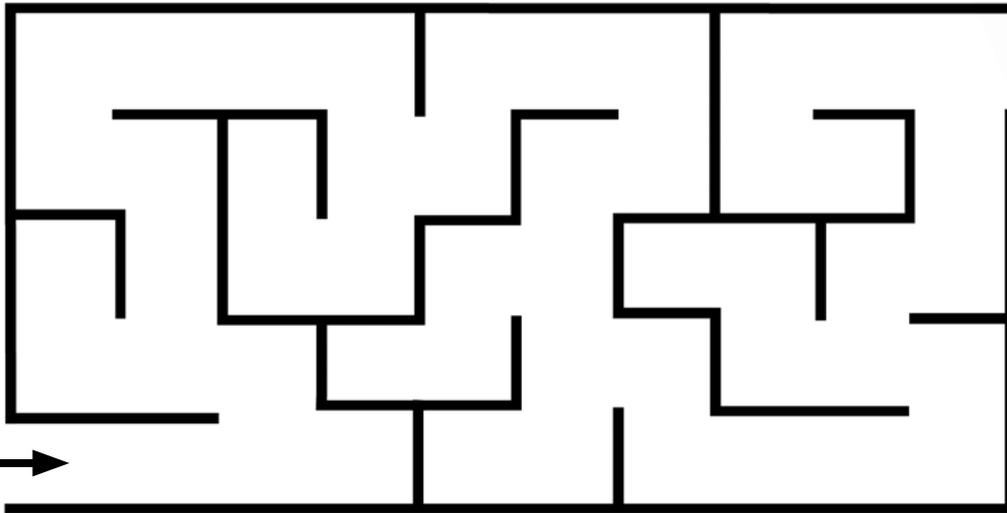
Draw what cubs need.

Cubs need a safe place to run and play.



Cubs need food.

Help the cubs find food.



LANGUAGE ARTS

Objectives

- Students will read text aloud with purpose and understanding.
- Students will participate in collaborative conversations.

Resources

- Language Arts Master (page 8)

Summary

There are different water forms in Yellowstone park. The article pictures and defines a river, waterfall, lake, hot spring, and geyser.

WORD WORK

Sight Words: *this, is, it, and, the, here, a, all, out, look, at, find, you*

BUILD VOCABULARY AND CONCEPTS

- **river**
- **waterfall**
- **lake**
- **hot spring**
- **geyser**

Select several images from magazines or the Internet of each of these water forms. After students have a chance to look at the images, work together to define what each of these water forms is. Elicit from students words that describe and distinguish one water form from the other.

To extend learning, have students, individually or in groups, pantomime the movement of these water forms, based on the information in the images and from the discussion around defining each water form. Some of the movements could be as follows:

- river (moving along, but not necessarily in a straight path)
- waterfall (moving from high to low to get the sense of water falling)
- lake (moving within a contained area)
- hot spring (bubbling water coming up from the ground)
- geyser (water shooting forcefully from the ground into the air)

READ AND DISCUSS

Read the article “Water Wonders” 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 page 8. Let students know that the photo on pages 8 and 9 is from Yellowstone park. Say: **Point to the land and the water in this photo.** Ask: **What else do you see?** (*Students may or may not know what animals are in the photo. Let them know that these animals are bison.*)

Pages 10–15 Read the text on pages 10–14, spread by spread. Ask students to point out each water form and discuss what distinguishes each one. For page 15, you might want students to work in pairs to find the water forms they read about on the map.

Paired Reading

You may want to have students work in pairs to read the article aloud. Ask students to follow this procedure:

- Read the article aloud together.
- Then take turns reading, with each person alternately reading a page at a time until the article is finished. Be sure to actively listen while the other person is reading.

Say: **Remember to help each other as you read. Ask your partner for help when you need it.** Encourage fluent reading, reminding students to practice good expression and intonation as they read aloud.

Provide the opportunity for collaborative discussion after paired reading. Partners can discuss how they thought they read as well as summarize what they learned about the different forms of water in Yellowstone park.

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 the water in Yellowstone park.**
- **Write or draw something you learned about water.**

Water Wonders

SCIENCE AND SOCIAL STUDIES

Objectives

- Students will learn that water takes many shapes and forms.
- Students will learn that people create parks to protect land and animals, and parks are places people can go to explore the outdoors.

Resources

- Park Habitats poster (Teacher's Edition)
- Science Master (page 9)

Science Background

There are several different water forms featured in "Water Wonders."

The Yellowstone River, at 671 miles in length, is the longest undammed river in the 48 contiguous states. It is one of the top river destinations for boating, fishing, and other recreational activities.

At 308 feet, Lower Falls is twice the height of Niagara Falls, but the volume of water in Niagara Falls is much greater.

Yellowstone Lake is the largest high-elevation lake in North America. It is ice-covered for nearly half the year, from mid-December to May or June.

Grand Prismatic Spring is Yellowstone's largest hot spring. It is approximately 370 feet in diameter with a depth of more than 121 feet.

Old Faithful erupts frequently. Eruption intervals can range from 60 to 110 minutes. Eruptions usually last between a minute and a half to five minutes.

ENGAGE

Some of your students may have visited Yellowstone park on a vacation. Ask students who have visited there if they can recall some of the sites they saw. Have on hand photos of the park, including some of the water forms mentioned in the article. Let students discuss and ask questions about the photos.

EXPLORE

Find Yellowstone on a map. Have students trace the boundaries of the park and determine which states the park spreads through. Find the state you live in and trace the distance on the map from where you live to the park. Ask: **How many states would we have to cross to get to Yellowstone?**

EXPLAIN

Read the article to students.

After reading, have students discuss with a partner what they learned about the different forms of water in Yellowstone park. Ask students to talk about what they learned by using the pictures in the article. Say: **With a partner, take turns talking about the different water forms. Look at the pictures and talk about the different shapes and features of each water form.**

ELABORATE

Explain that Yellowstone is the world's first national park. It opened in 1872. Let students know that national parks are public lands where plants, animals, and their habitats are protected. Use the Park Habitats poster to guide students in learning more about different national park habitats.

The National Park Service celebrated its 100th anniversary on August 25, 2016. You can explore more about the national parks at www.nationalgeographic.org/idea/national-park-resources/.

EVALUATE

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

- **What are some different forms of water in Yellowstone park?**
- **Describe two forms of water.**

LANGUAGE ARTS: Water Wonder Words

Draw a line to match a sentence to a word.

1. A  flows across the land.

geyser

2. A  falls from a high place.

river

3. A  has land around it.

lake

4. A  has hot water.

waterfall

5. A  shoots water into the air.

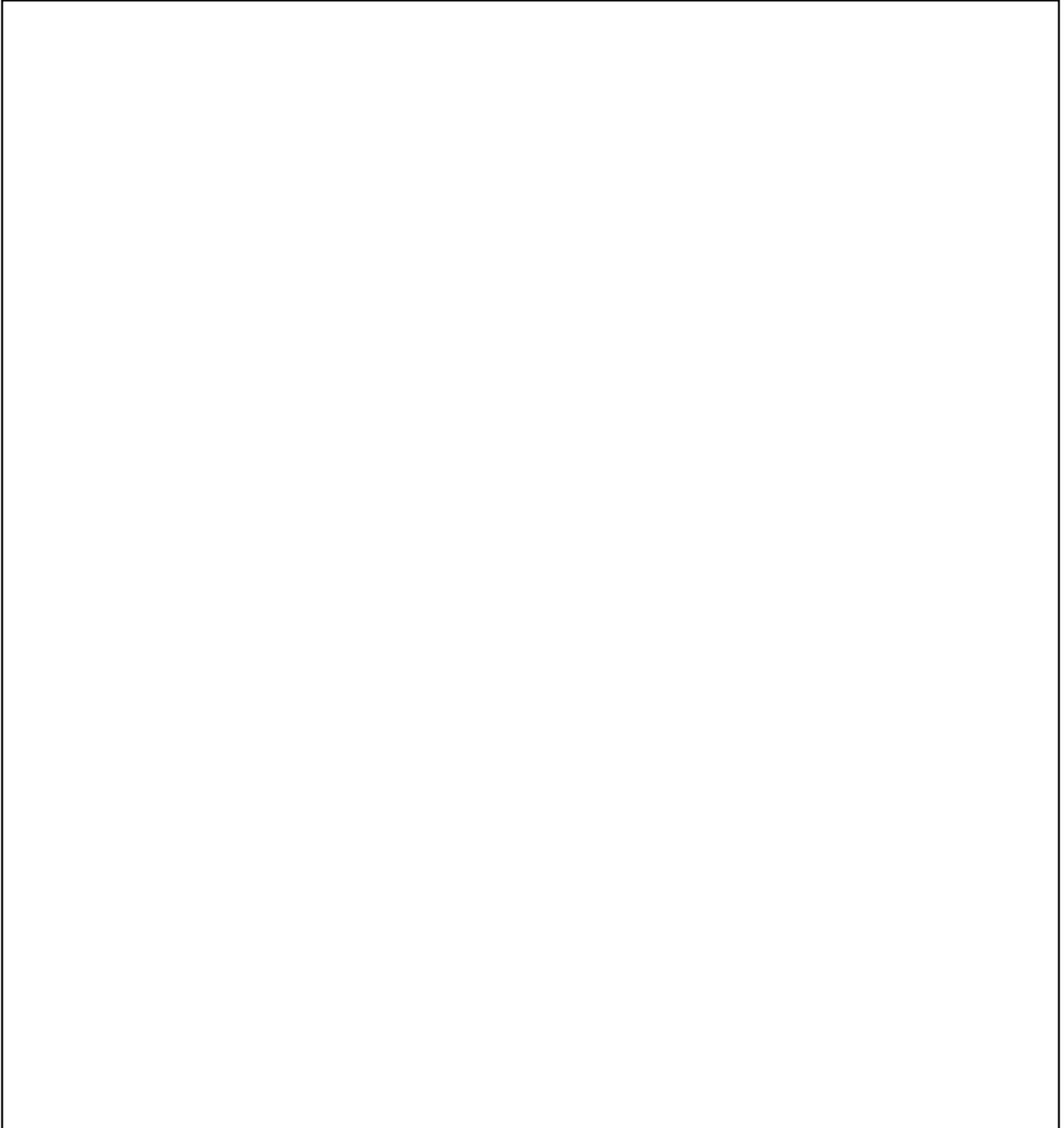
hot spring

Name _____

Date _____

SCIENCE AND SOCIAL STUDIES: Draw a Water Form

Draw your favorite water form. Write the name of the water form.



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LANGUAGE ARTS

Objectives

- Students will describe the relationship between photos and text.
- Students will create sentences in shared language activities.

Resources

- Language Arts Master (page 12)

Summary

Students explore math concepts in a rain forest setting.

WORD WORK

Sight Words: *one, a, on, to, are, there, in, all, two, three, four,*

BUILD VOCABULARY AND CONCEPTS

- sloth/sloths
- frog/frogs
- butterfly/butterflies

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 “Rain Forest Math” and point out pictures of the vocabulary words to students.

Let students know that to make words that mean “more than one,” you can add /s/ (or /ies/ for words ending in y). Use these sentence frames to have students determine whether the singular or plural form of the vocabulary words should be used. You can use these frames to fill in any of the animal names.

A _____ is a rain forest animal.

There are many _____ in the rain forest.

READ AND DISCUSS

Read the article “Rain Forest Math” 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 and have students describe how the picture shows what the text explains. Ask: **How does the picture help you understand what the text says?** (*The picture shows the mother sloth hanging from the tree and the baby holding on to its mother.*)

Say: **Let’s write a sentence about the sloths.** Then together create a sentence such as “Two sloths are in a tree.”

Pages 18–19 Read the text and have students describe how the pictures show what the text explains. Ask: **How do the pictures help you understand what the text says?** (*The pictures show a frog on a branch and two frogs on a log.*)

Say: **Let’s write a sentence about the frogs.** Then together create a sentence such as “There are frogs in the rain forest.”

Pages 20–21 Read the text and have students describe how the pictures show what the text explains. Ask: **How do the pictures help you understand what the text says?** (*The pictures show butterflies on a leaf and on a flower.*)

Say: **Let’s write a sentence about the butterflies.** Then together create a sentence such as “The butterflies are on a leaf and on a flower.”

Pages 22–23 Read the text and have students describe how the pictures show what the text explains. Ask: **How do the pictures help you understand what the text says?** (*The pictures show birds on a branch and birds flying.*)

Say: **Let’s write a sentence about the birds.** Then together create a sentence such as “The birds can sit and fly.”

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 the animals by looking at the pictures.**
- **Write or draw something about one of the animals.**

MATH

Objective

- Students will count to answer “how many?” questions.

Resources

- Part Part Whole poster (Teacher’s Edition)
- Math Master (page 13)

Math Background

Share with students the names of the rain forest animals pictured in the article.

- three-toed sloths
- red-eyed frog
- strawberry poison dart frogs
- glasswinged butterflies
- Numata longwing butterflies
- brown-hooded parrots
- macaws

READ AND CALCULATE

Read the article “Rain Forest Math” aloud to students as they follow along. As you read through each two-page spread, work together to determine the answers to the math equations.

Pages 16–17 Read the text and work through the math together. Point out the equation $1 + 1 = 2$. Write it on the board. Say: **Count to add the sloths.** Ask: **How many sloths are there in all?** {2}

Pages 18–19 Read the text and work through the math together. Point out the equation $1 + 2 = ?$ Write it on the board. Say: **Count to add the frogs.** Ask: **How many frogs are there in all?** {3}

Pages 20–21 Read the text and work through the math together. Point out the equation $3 + 4 = ?$ Write it on the board. Say: **Count to add the butterflies.** Ask: **How many butterflies are there in all?** {7}

Pages 22–23 Read the text and work through the math together. Point out the equation $4 + 5 = ?$ Write it on the board. Say: **Count to add the birds.** Ask: **How many birds are there in all?** {9}

EXPLORE NUMBERS

Use the Part Part Whole poster to explore more about numbers. Guide students to understand that a number is made of parts, and you can add those parts together to find the whole. Use the equations and the pictures to work through some or all of equations on the poster.

PLAY RAIN FOREST FUN

Encourage students to practice their addition skills with the Math Master for this article. Pairs of students will need a copy of the Math Master, a coin or a chip with two different sides, and playing pieces.

LANGUAGE ARTS: Create Sentences

Put number, animal, and action words together to make sentences about the article.

Numbers		Animals		Actions
One		frogs		hangs from a tree
Two		butterflies		sit on a log
Three		sloth		sit on a leaf

1. One _____ hangs from a tree.
 number animal action

2. _____ sit on a log _____
 number animal action

3. _____ _____ _____
 number animal action

Write your own sentence.



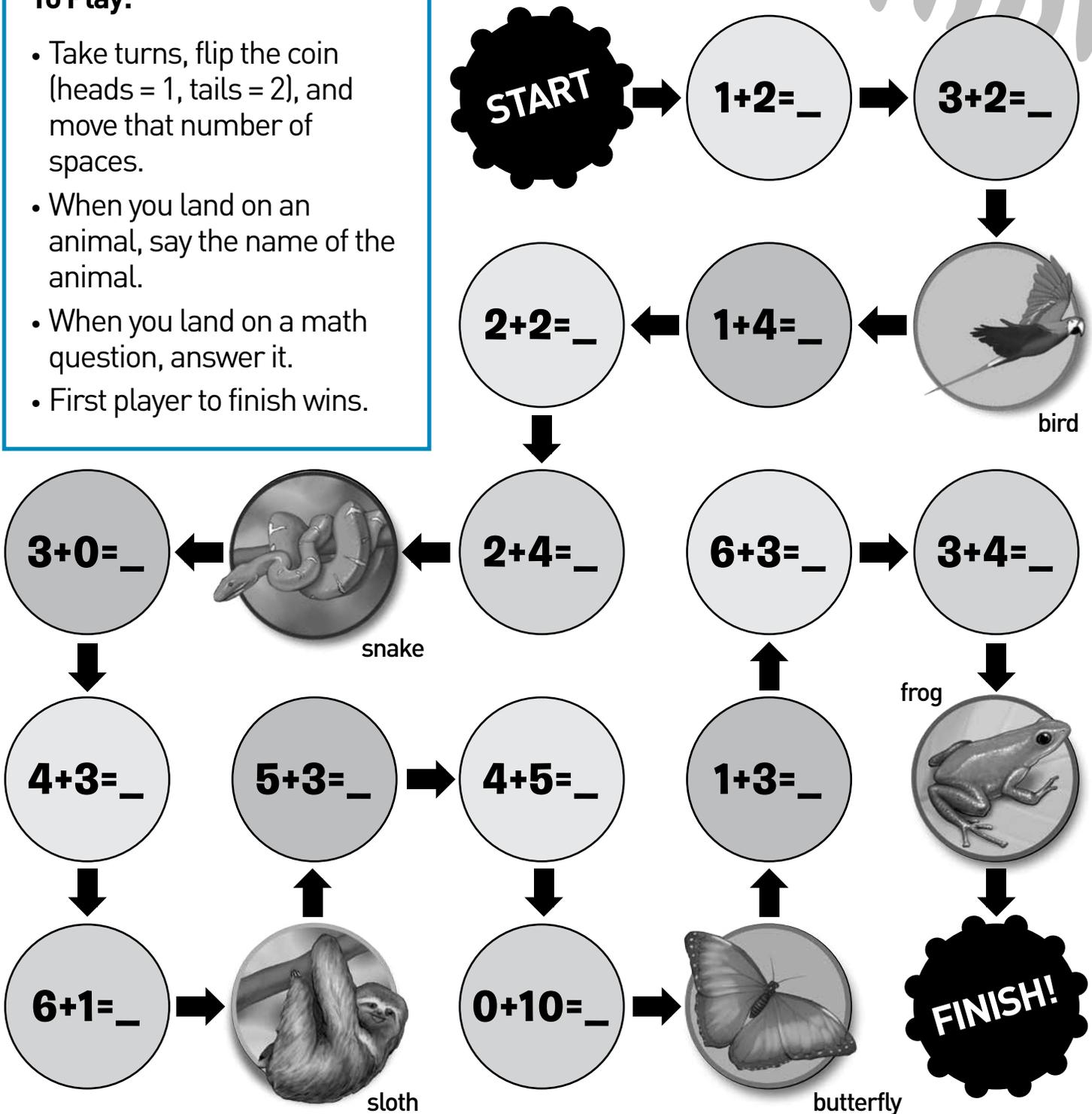
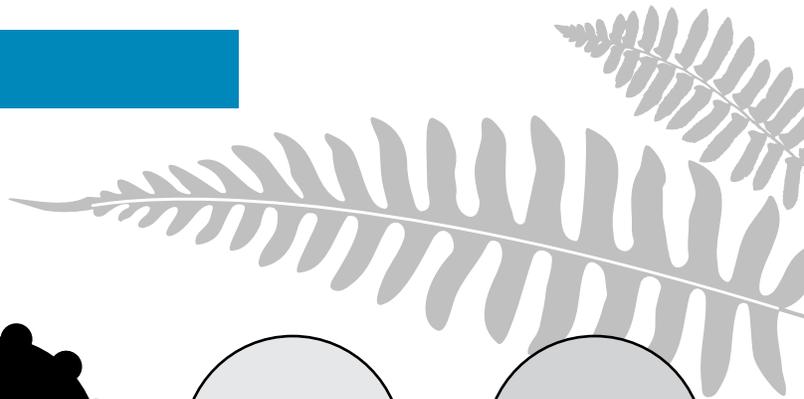
_____ _____ _____
 number animal action

MATH: Rain Forest Fun

You Will Need: a coin, playing pieces, a partner

To Play:

- Take turns, flip the coin (heads = 1, tails = 2), and move that number of spaces.
- When you land on an animal, say the name of the animal.
- When you land on a math question, answer it.
- First player to finish wins.



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ANSWER KEY

Grizzly Bear Family

Language Arts: Main Idea and Details, page 4

Students should circle the main idea and draw the details.

Main Idea: A mother bear helps her cubs live.

Science: What do cubs need?, page 5

Students should draw what cubs need and complete the maze to help the cubs find food.

Water Wonders

Language Arts: Water Wonder Words, page 8

Students should draw a line to match a sentence to a word.

1. river
2. waterfall
3. lake
4. hot spring
5. geyser

Science and Social Studies: Draw a Water Form, page 9

Students should draw and name their favorite water form.

Rain Forest Math

Language Arts: Create Sentences, page 12

Students should use the number, animal, and action words to make sentences and then write their own sentence.

One sloth hangs from a tree.

Two frogs sit on a log.

Three butterflies sit on a leaf.

Math: Rain Forest Fun, page 13

Students should work with a partner to play Rain Forest Fun. The first player to finish wins.