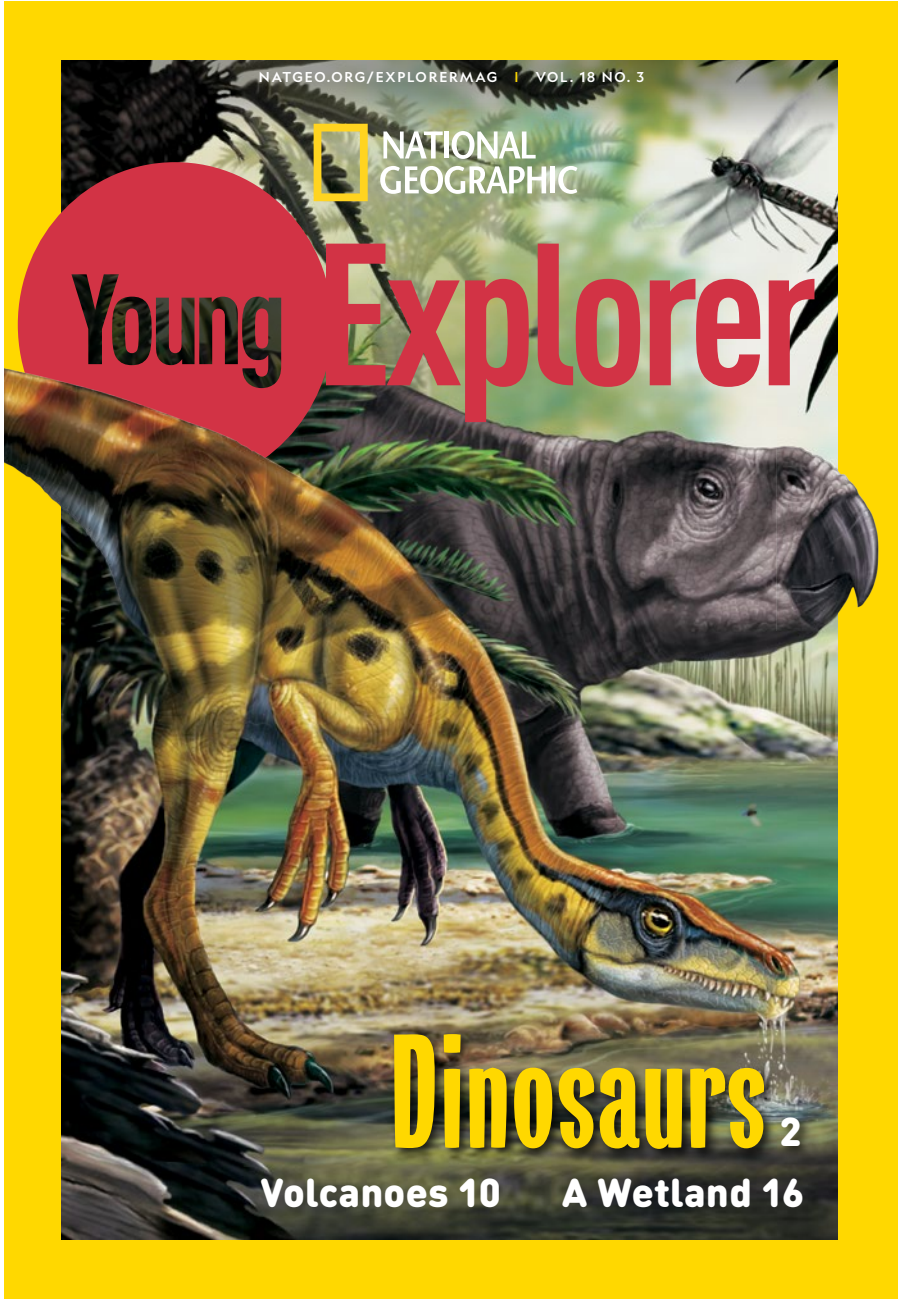


TEACHER'S GUIDE
Scout and Voyager
Vol. 18 No. 3

IN THIS GUIDE:

Educational consultant **Stephanie Harvey** has helped shape the instructional vision for this Teacher's Guide. Her goal is to ensure you have the tools you need to enhance student understanding and engagement with nonfiction text.

Lexile® Framework Levels

Scout
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.

Voyager
What Did Dinosaurs Eat? 310L
Volcanoes 340L
A Wonderful Wetland 390L

National Standards Supported

- Common Core State Standards (CCSS)
- Next Generation Science Standards (NGSS)
- C3 Framework for Social Studies State Standards (C3)

For additional resources to extend your students' learning, visit EXPLORER'S website:
NATGEO.ORG/EXPLORERMAG-RESOURCES

National Geographic Learning Framework

INTRODUCTION

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.

MINDSET OF AN EXPLORER

KEY FOCUS AREAS

A — *Attitudes*

National Geographic kids are:

CURIOUS 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 backyards to the lions in Africa.

LANGUAGE ARTS Infer From Images

Kindergarten 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)

First Grade Standard Supported

- **CCSS Reading Informational Text:** Use the illustrations and details in a text to describe its key ideas. (1-7)

What You Will Need

- "What Did Dinosaurs Eat?" (*Young Explorer*, pages 2–9)
- Think Sheet (Teacher's Edition, page 5)
- Clipboards
- Pencils

CONNECT & ENGAGE (5 minutes)

Kids are in a group on the floor in front of you. Sit on a low chair and hold up pages 2–3 in the magazine.

TEACHER TIP: The reason kids are grouped on the floor is that the focus needs to be on the teacher's instruction. However, the whole point of "Connect and Engage" is to get kids fired up, and there will be plenty of interaction throughout this segment and the entire lesson.

Take a look at this amazing picture of dinosaurs. Dinosaurs lived on Earth long ago. Let's look closely at the picture. What do you notice? Turn and talk about what you notice.

Kids turn and talk and then share out.

You noticed a lot! That's great because we're going to use our observation skills as we continue on with this article. If we look carefully, the pictures will help us figure some things out as we read.

MODEL (10 minutes)

Kids sit in a group on the floor, with you in a low chair in front of them.

We are going to read this article called "What Did Dinosaurs Eat?" (*Point to the title.*) **You had a lot of great observations when you looked at the picture on pages 2–3. Now let's look at the picture again with this question in mind: What did dinosaurs eat?**

TEACHER TIP: You might want to cover up the labels with tape while you talk about the picture. This will help kids infer. Inferring is taking what kids know—their background knowledge—and merging it with clues in the picture to figure something out.

I'm going to read the text to see what we can learn.

Read the text on page 2.

Okay. We found out that some dinosaurs ate meat and others ate plants. I wonder if we can figure out some more information about that by looking at the picture. What do you think?

I think we can too! I've covered up the labels, so we can really use our observation skills. If we look closely at the picture, we can get quite a bit of information. First, let's think about what animals use to eat. Turn and talk about that.

Kids turn and talk. They might say that dinosaurs would use their mouths, feet and claws to eat.

Yes! They would definitely use their mouths and their feet to eat. Now, what do you notice about the dinosaurs' mouths? Are they all the same? That's right. Some look like they have really sharp teeth. Others don't. And what about the feet? Yes. Some have really nasty looking claws.

These are clues we can use to figure out, or infer, which dinosaurs were meat eaters and which were plant eaters. Turn and talk about that.

Kids turn and talk and some share out.

So you think the meat eater has the sharp teeth and claws. Let's take the tape off the labels and see if we're right.

Remove the tape to reveal the labels.

Well done, class! We used the picture to infer, or figure out, more information. I'm going to write down on a Think Sheet the facts and what we figured out. I'll write that the facts were "sharp teeth" and "sharp claws." We figured out that dinosaur was a meat eater. I'll put "meat eater" in the inference column.

GUIDE (10 minutes)

Hand out the Think Sheets attached to the clipboards.

Now look at the picture on pages 4–5. Do you think this dinosaur, *Tyrannosaurus rex*, was a meat eater or a plant eater? Turn and talk about that.

Kids turn and talk. Then read the text to them.

The text also gives us information, but I'm sure you noticed a lot by looking at the picture. Draw the facts you learned about this dinosaur on your Think Sheet. Then let's write what we figured out, just by looking at the picture and using some of the knowledge we already know about dinosaurs.

Kids should draw the dinosaurs' strong jaw and teeth in the "Facts" column and write "meat eater" in the Inference column.

Now let's look at pages 6–7. Look at the pictures on these pages and see if you can figure out, or infer, if this dinosaur was a meat eater or a plant eater. Turn and talk about that with a partner.

Kids turn and talk. Then read the text to them.

Use your Think Sheet to draw the facts and write your inference about this dinosaur.

Well, we found out that this dinosaur, *Brachiosaurus*, was a plant eater. Its long neck helped it reach leaves in tall trees, and the shape of its teeth helped it pull the leaves off the trees. Pretty cool!

COLLABORATE (25 minutes)

Read the text on pages 8–9 to students. Then have them partner up to look at the pictures to figure out which was a plant eater and which was a meat eater.

Now, with a partner, look at the pictures on pages 8–9 and try to figure out which was the meat eater and which was the plant eater. Use what you already know and the clues in the pictures to help you figure this out.

Kids partner up to work together. Have kids share and compare with other partner groups when they think they have the answers.

When you are finished, draw your own plant-eating or meat-eating dinosaur. Use what you've learned, and be sure to draw clues that will help us infer what your dinosaur is.

SHARE THE LEARNING (10 minutes)

Kids join a sharing circle with you and share out, using respectful language. Have them share their drawings and the clues they used to infer if their dinosaur is a meat eater or a plant eater.

Kids share out using the respectful sharing protocol.

Okay, now it's time to share your drawings and show us what you drew and the clues you used to help us figure out if your dinosaur is a plant eater or a meat eater. I am going to invite [student name] to share. We are going to share using respectful language. So when I ask: "[student name] would you like to share your drawing?" You can say: "Yes thank you." Then you can share what you drew. After you share, you can invite someone else to share. To do that, you need to call on the person by name and use the same language we just practiced. When we use polite, respectful sharing language, everyone pays closer attention to the important information being shared. Everyone likes to be listened to when they share out, so remember to pay attention to the person who is sharing.

Kids share out and invite others to share, always using the respectful sharing language that was modeled. Allow time for about three or four kids to share out with the whole group. Once they are finished, have everyone turn and share with the person next to them, so that all have a chance to be heard.

Today we learned that we can figure out, or infer, information from pictures. Pictures give us a ton of clues, if we look closely at them and also use what we already know. You all did an awesome job inferring today!

Name _____ Date _____

THINK SHEET

Write or draw the facts and the inferences.

Facts	Inferences

LESSON FRAME Infer From Images

This frame is a template of the language arts lesson. It has the instructional moves and language of the lesson, but the specific content has been removed. This way you can use the Lesson Frame for the other articles in the issue or for any nonfiction text you might be teaching.

What You Will Need

• Nonfiction text • Think Sheet template • Clipboards • Pencils

CONNECT & ENGAGE (5 minutes)

Kids are in a group on the floor in front of you. Sit on a low chair and hold up the magazine.

Take a look at this amazing picture of _____. Let's look closely at the picture. What do you notice? Turn and talk about what you notice.

Kids turn and talk and then share out.

You noticed a lot! That's great because we're going to use our observation skills as we continue on with this article. If we look carefully, the pictures will help us figure some things out as we read.

MODEL (10 minutes)

Kids sit in a group on the floor, with you in a low chair in front of them.

We are going to read this article called "_____." (*Point to the title.*) You had a lot of great observations when you looked at the picture on page(s) _____. Now let's look at the picture again with this question in mind: _____?

I'm going to read the text to see what we can learn.

Read the text.

Okay. We found out _____. I wonder if we can figure out some more information about that by looking at the picture. What do you think?

I think we can too! If we look closely at the picture, we can get quite a bit of information. Turn and talk about that.

Kids turn and talk.

These are clues we can use to figure out, or infer, some things about _____. Turn and talk about the clues you found.

Kids turn and talk and some share out.

Well done, class! We used the picture to infer, or figure out, more information. I'm going to write down on a Think Sheet the facts and what we figured out, or our inferences.

GUIDE (10 minutes)

Hand out the Think Sheets attached to the clipboards.

Now look at the picture on page(s) _____. What can you infer from that picture? Turn and talk about that.

Kids turn and talk. Then read the text to them.

The text also gives us information, but I'm sure you noticed a lot by looking at the picture. Draw the facts you learned about _____ on your Think Sheet. Then let's write what we figured out, just by looking at the picture and using some of the knowledge we already know about _____.

Kids should draw what the facts are in the "Facts" column and write what they inferred in the "Inference" column.

COLLABORATE (25 Minutes)

Read the text on pages _____ to students. Then have them partner up to look at the pictures to figure out _____.

Now, with a partner, look at the pictures on pages _____ and try to figure out _____. Use what you already know and the clues in the pictures to help you figure this out.

Kids partner up to work together. Have kids share and compare with other partner groups.

When you are finished, draw your own picture of _____. Use what you've learned, and be sure to draw clues that will help us infer what your picture shows us.

SHARE THE LEARNING (10 minutes)

Kids join a sharing circle with you and share out, using respectful language. Have them share their drawings and the clues they used to infer information.

Kids share out using the respectful sharing protocol.

Okay, now it's time to share your drawings and show us what you drew and the clues you used to help us infer. I am going to invite [student name] to share. We are going to share using respectful language. So when I ask: "[student name] would you like to share your drawing?" You can say: "Yes thank you." Then you can share what you drew. After you share, you can invite someone else to share. To do that, you need to call on the person by name and use the same language we just practiced. When we use polite, respectful sharing language, everyone pays closer attention to the important information being shared. Everyone likes to be listened to when they share out, so remember to pay attention to the person who is sharing.

Kids share out and invite others to share, always using the respectful sharing language that was modeled. Allow time for about three or four kids to share out with the whole group. Once they are finished, have everyone turn and share with the person next to them, so that all have a chance to be heard.

Today we learned that we can figure out, or infer, information from pictures. Pictures give us a ton of clues, if we look closely at them and also use what we already know. You all did an awesome job inferring today!

What Did Dinosaurs Eat?

SCIENCE

Kindergarten Standard Supported

- **NGSS LS1.C: Organization for Matter and Energy Flow in Organisms:** All animals need food in order to live and grow. They obtain their food from plants or from other animals. (K-LS1-1)

First Grade Standards Supported

- **NGSS LS1.A: 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. (1-LS1-1)
- **NGSS Crosscutting Concepts: Patterns:** Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1-LS1-2)

What You Will Need

- Dinosaur Diets poster (Teacher's edition)
- Science Master (page 9)

Science Background

Dinosaurs are giant reptiles that first appeared on Earth about 245 million years ago. Over time, they evolved into more than 700 different species. Some, the ancestors of modern birds, could fly. Others could not. All non-flying dinosaurs became extinct about 66 million years ago.

Paleontologists, or scientists who study dinosaurs, use fossils to learn what dinosaurs were like. Fossilized teeth, for example, can reveal the type of food a particular dinosaur ate.

Some dinosaurs, like the *Tyrannosaurus rex*, were meat eaters. Their teeth were pointed, curved slightly backward, and had serrated edges. These teeth were excellent tools for catching, slicing, and tearing meat.

Other dinosaurs ate plants. Their teeth came in different shapes and sizes, depending upon the type of plant they ate. Wide flat teeth could grind up tough plants. Long, pencil-like teeth could rake leaves off of branches.

ENGAGE

Invite students to flip through the article and turn and talk with a partner to discuss what they see. Brainstorm ideas about why there are illustrations but no photos in the article. (*Dinosaurs lived long ago. The illustrations show what scientists think each dinosaur looked like.*) Invite students to share what they know about dinosaurs.

EXPLORE

Display pages 2-3 of the projectable magazine. Read aloud the headline and text. Brainstorm ideas about what dinosaurs ate. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, point out to students that—like animals alive today—different types of dinosaurs ate different types of foods. Have students turn and talk as they identify the foods dinosaurs ate (*plants or meat*). Have them explain where the meat that meat eaters ate came from (*other animals*). Encourage students to identify the meat- and plant-eating dinosaurs named in the article. Then challenge them to explain how different body parts helped dinosaurs get the food they needed to survive. (*Meat eaters had strong jaws and sharp teeth to help them eat meat. Plant eaters had long necks and teeth shaped like spoons/rakes to help them pull leaves from tall trees.*)

ELABORATE

Display the Dinosaur Diets poster. Read aloud the text at the top. Challenge students to explain what the four dinosaurs in the "Meat Eater" column most likely had in common (*strong jaws and sharp teeth*). Point out that not all of the plant eaters have long necks. Ask: **What body part was likely to be similar?** (*teeth*) **How?** (*They were probably shaped like spoons/rakes.*) As a class, identify plants that plant eaters with short necks might have eaten (*grass, bushes, low-lying leaves*)

EVALUATE

Have students complete the Science Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Name _____ Date _____

SCIENCE: What Did Dinosaurs Eat?

Look at these dinosaurs.

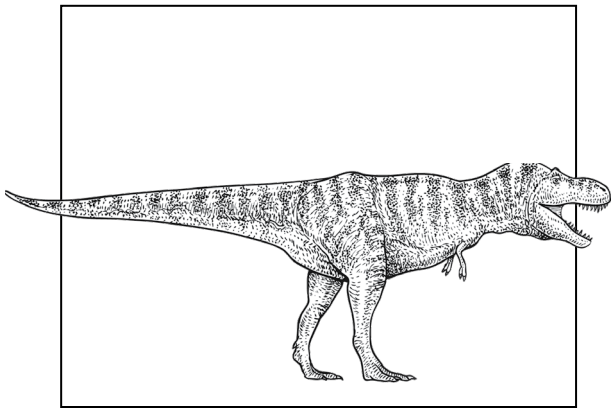
Draw lines to show which parts each dinosaur had.

Tyrannosaurus rex

[Tye-RAN-oh-SORE-us rex]

Brachiosaurus

[BRACK-ee-oh-SORE-us]

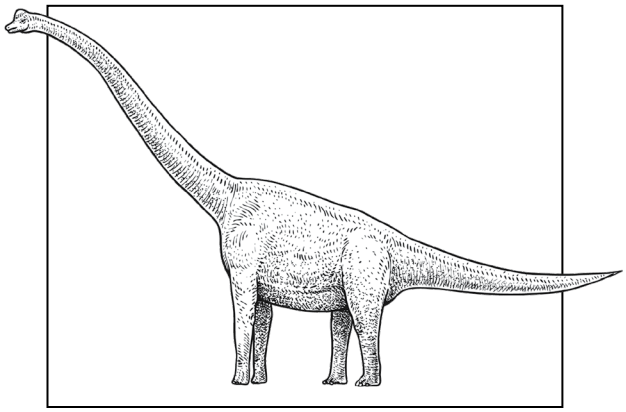


strong jaws

long neck

teeth shaped like spoons or rakes

sharp teeth



What did each of these dinosaurs eat? Circle the answers.

meat	meat
plants	plants

Tell how their parts helped them eat different foods.

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Volcanoes

SCIENCE

Kindergarten Standard Supported

- **NGSS Crosscutting Concepts: Cause and Effect:** Events have causes that generate observable patterns. (K-ESS3-2), (K-ESS3-3)

First Grade Standard Supported

- **NGSS Science and Engineering Practices: Planning and Carrying Out Investigations:** Make observations (firsthand or from media) to collect data that can be used to make comparisons. (1-ESS1-2)

What You Will Need

- Land and Water poster (Teacher's edition)
- Science Master (page 11)

Science Background

Some volcanoes look like mountains, but they are actually openings in Earth's crust through which magma, gases, and ash come to the surface. Lava is magma that has broken through Earth's surface.

Sometimes, volcanoes erupt. These events are not random. They usually occur in places where the giant plates that make up Earth's crust move, spread apart, or slide together. Volcanoes can also erupt in the middle of a plate. Places where this occurs are called hot spots.

Each time a volcano erupts, lava and other products build up along their slopes. Mauna Kea, the world's tallest volcano, is located on a hot spot under the island of Hawaii. Its summit rises 4,205 meters above sea level. But if you measure from the sea floor, Manua Kea is more than 9,000 meters tall.

Volcanoes are one of many different landforms found on Earth. Others include mountains, hills, forests, grasslands, and deserts. There are also many different forms of water, such as waterfalls, rivers, lakes, and oceans.

ENGAGE

Play a cause-and-effect game with students to help them recognize the type of relationship. Begin with these examples. Then create more examples of your own.

- Cause: The sun sets; Effect: The sky gets dark.
- Cause: The sun rises; Effect: The sky gets bright.
- Cause: It rains; Effect: The ground gets wet.

EXPLORE

Display pages 10-11 of the projectable magazine. Have students examine the photo. Read aloud the headline and text. Challenge students to make a connection between what they see in the photo and what they heard or read in the text. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, remind students of the cause-and-effect game they played before reading the article. Point out that the cause is why something happened and the effect is what happened. Encourage students to use that same strategy to explore how volcanoes get taller.

- Cause: Hot, melted rock rises; Effect: It comes out of a volcano.
- Cause: Melted rock comes from a volcano; Effect: It is now called lava.
- Cause: Lava cools; Effect: It turns into rock.
- Cause: Rock builds up; Effect: The volcano gets taller.

Have students turn and talk with a partner to discuss why it takes time for a volcano to get as tall as a mountain.

ELABORATE

Point out that volcanoes are one of many features found on Earth. Display the Land and Water poster. Read aloud the text. Have students find the volcano and then identify the other features on the poster. Challenge students to categorize the features as land or water forms.

EVALUATE

Have students complete the Science Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Name _____ Date _____

SCIENCE: Volcanoes

Draw pictures to show how a volcano gets taller.

Write words from the box on the lines. Tell how a volcano gets taller.

builds	turns	looks	comes	gets	cools

Hot, melted rock _____ out of Earth.

The melted rock is now called lava. The lava _____.

The lava _____ into rock.

Over time, the rock _____ up.

The volcano _____ taller.

The volcano _____ like a mountain.

A Wonderful Wetland

SCIENCE

Kindergarten Standard Supported

- **NGSS ESS3.A: Natural Resources:** Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESSE3-1)

First Grade Standard Supported

- **NGSS Crosscutting Concepts: Patterns:** Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1-ESS1-1), (1-ESS1-2)

What You Will Need

- Science Master (page 13)

Science Background

A wetland is an area where water covers the soil or is at or near the soil's surface for a specific time of year. The Okavango Delta, located in the northwest corner of Botswana, is a giant wetland that spreads across 15,000 square kilometers. It is the largest freshwater ecosystem in the world.

The Okavango Delta is also unique. Most deltas form where rivers flow into the ocean. This delta exists where the Okavango River empties into the Kalahari Desert.

The Okavango Delta is home to some of the world's most endangered large animal species. This includes cheetahs, white rhinoceroses, black rhinoceroses, African wild dogs, and lions. Other large animals that live here are giraffes, antelopes, Nile crocodiles, warthogs, and the plains zebra. About 400 species of birds and 71 species of fish call the Okavango Delta home, too.

Life on the delta is ruled by the weather. The wet season typically begins in March and peaks in July. Many large animals leave the delta during this time to make their homes in the lush grasslands that surround the delta.

ENGAGE

Prior to conducting this lesson, write the word "wet" on a sentence strip. Write "land" on another. Display the strip with the word "wet." Encourage students to explain what it means. Do the same with the "land" strip. Put the two strips together to form one word. Challenge students to define the word "wetland."

EXPLORE

Display pages 16-17 of the projectable magazine. Have students examine the photo. Ask: **What is the land like in this photo?** (*very wet*) **What plants and animals do you see?** (*lily pads, elephants*) **What else do you see?** (*lots of water*) Invite students to discuss what it is like in a wetland. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, remind students that living things need water, air, and resources from the land to survive. And they live in places where they can find each of these things. Ask: **What kinds of animals live in this wetland?** (*birds, fish, frogs* (*Voyager only*), *waterbucks, crocodiles, hippopotamuses, zebras, lions*) Encourage students to turn and talk to discuss what each of these animals gets from the wetland. Then point out that plants are living things, too. As a class, identify what plants need and where they can find those things in the wetland. Guide students to recognize that the wetland is full of living things and it has the things they need to survive there.

ELABORATE

Display page 23 of the projectable magazine. Discuss what Adjany Costa is doing and how sharing what she learns could help save this wetland. Challenge students to explain why it is important to keep the water in the wetland clean. Brainstorm a list of things people in other places can do to keep the water where they live clean, too.

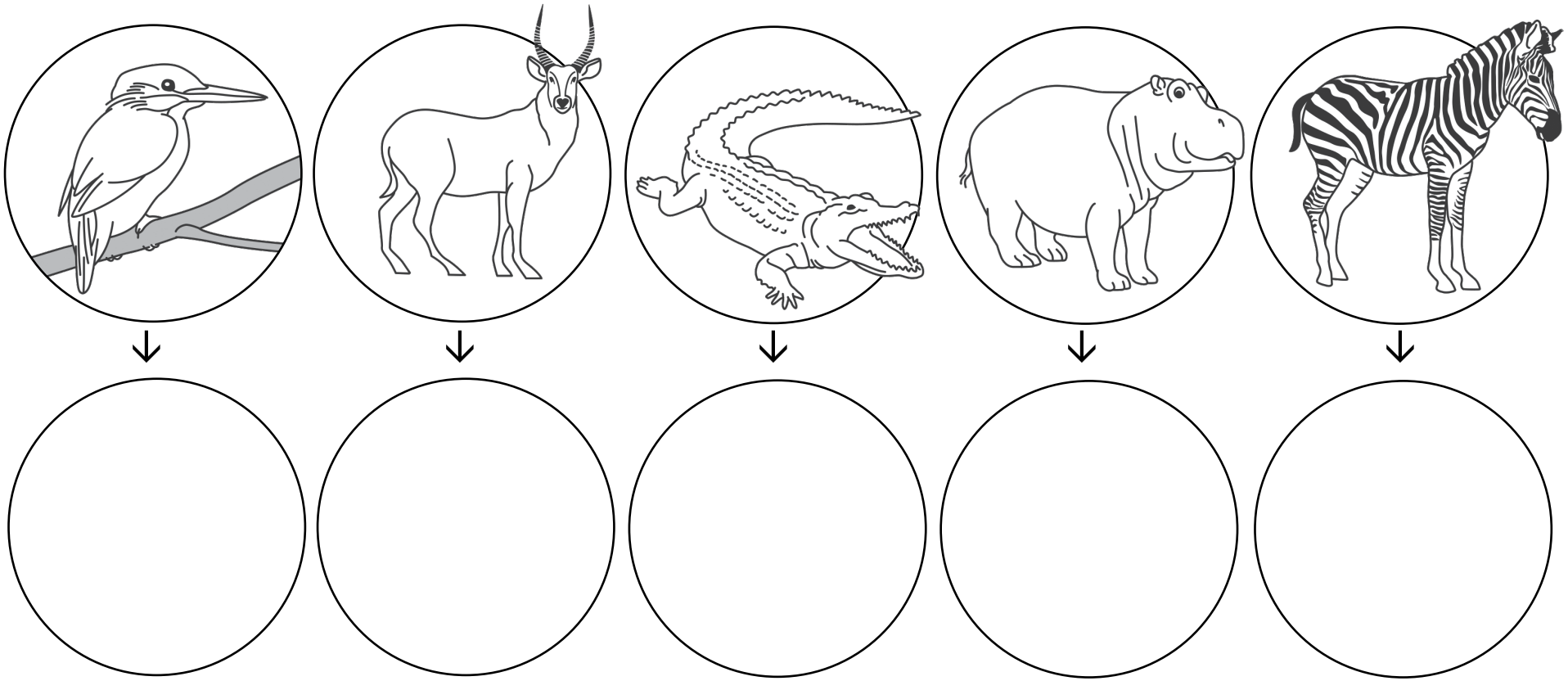
EVALUATE

Have students complete the Science Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Name _____ Date _____

SCIENCE: A Wonderful Wetland

Write or draw something each animal gets from the wetland.



Complete the sentence.

I think lions get _____ from the wetland.

Explore Maps

SOCIAL STUDIES

Standard Supported

- **C3 Geographic Representations: Spatial Views of the World:** Construct maps, graphs, and other representations of familiar places. (D2.Geo.1.K-2)

What You Will Need

- Social Studies Master (page 15)

Social Studies Background

Creating maps is an essential skill that students must learn in order to better understand the world around them. Maps relay knowledge that is both personally and socially useful. Understanding how to read maps helps people make decisions and solve problems, whether they are studying places in ancient history or just trying to find the quickest route to the grocery store.

To create an accurate map, students must know how to gather relevant information about the area the map will represent. That process begins with asking geographic questions and then organizing and analyzing the answers . Students can use those answers to create a detailed map that is simple and easy for others to use.

ENGAGE

Instruct each student to take out a crayon and stand it up on its base on a table. While they are sitting, have students lean forward so they can examine the side of the crayon at eye level. Then have them stand up and look straight down at the crayon. Invite students to compare and contrast the shape they see as they examine the crayon from the side and from above.

EXPLORE

Display the activity on the back cover of the projectable magazine. Have students examine the pictures. Ask: **How are these pictures the same ?** (*All show the same house.*) **How are they different?** (*They show the house from different views.*) Read aloud the title and big idea. Then read aloud the rest of the activity or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, tell students that, like the crayons they examined earlier, these pictures show the same thing from different views. Say: **Most maps show what places look like from above. If you're looking down on a place, you can see where everything is. But if you looked it from eye-level, you could only see what was right in front of you.** Divide the class into small groups. Have each group examine the pictures to find other features that are the same. (*houses on right and left, tree on left, swing set, sidewalk, street, car, six bushes around yellow house*)

ELABORATE

Locate your school on Google Maps. Display the map for all students to see. Tell the class that this map shows the area around your school from above. Challenge students to find the school's roof, the playground, streets, and other objects in the area. Encourage students to describe how these objects look different when seen from above.

EVALUATE

Have students complete the Social Studies Master for this lesson. Encourage them to share and compare their results in small groups or with a partner.

Name _____ Date _____

SOCIAL STUDIES: Explore Maps

Stand up and look down at your feet.

What do they look like from above? Draw them.

Look down at something else in the classroom. Draw what you see.

Show your picture to a classmate. Can they guess what it is?

Scout and Voyager

ANSWER KEY

Language Arts Lesson

Think Sheet, page 5
Students should draw their thinking about the article they read in the rectangles on the Think Sheet.

What Did Dinosaurs Eat?

Science: page 9
Tyrannosaurus rex: meat
Brachiosaurus: plants
Possible responses: The *T-rex's* jaws and teeth helped it eat animals. The *Brachiosaurus's* neck and teeth helped it pull leaves from tall trees.

Volcanoes

Science: page 11
The three drawings should resemble the illustrations on page 15 of the article.

1. comes; 2. cools; 3: turns; 4: builds; 5: gets; 6: looks

A Wonderful Wetland

Science: page 13
kingfisher: Students are likely to draw the bird eating fish or frogs. They may write the words "fish," "frog," or "food."

waterbuck: Students are likely to draw the buck eating grass or other plants. They may write the words "grass," "plants," or "food."

crocodile and hippopotamus: Students are likely to draw the animals resting or swimming in the cool water. They may write the word "water."

zebra: Students are likely to draw zebras drinking water or to write the word "water."

lions: Students may write the words "food" or "water."

Explore Maps

Social Studies: page 16
Students should draw a picture of their feet as seen when they stand up and look down. Then they should select another object in the classroom and draw a picture showing what it looks like from above.

Explore Maps

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1. Should put their finger on the yellow house with the red roof in pictures 1, 2, and 3.
2. Students should draw a picture of their feet as seen when they stand up and look down.