



TEACHER'S GUIDE

SCOUT AND VOYAGER | VOL. 20 NO. 3

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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

Seasons Change.....	250L
Dancing Dragons.....	330L
Flamingo Bob.....	340L

STANDARDS SUPPORTED

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

See each lesson for the specific standard covered.

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.



Visit EXPLORERMAG.ORG to access digital issues of Explorer magazine in **English** and **Spanish**. Engage students with digital read-alouds, videos, and interactive activities.

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

ATTITUDES



CURIOSITY An explorer remains curious about how the world works throughout his or her life. An explorer is adventurous, seeking out new and challenging experiences.

RESPONSIBILITY An explorer has concern for the welfare of other people, cultural resources, and the natural world. An explorer is respectful, considers multiple perspectives, and honors others regardless of differences.

EMPOWERMENT An explorer acts on curiosity, respect, responsibility, and adventurousness and persists in the face of challenges.

SKILLS



OBSERVATION An explorer notices and documents the world around her or him and is able to make sense of those observations.

COMMUNICATION An explorer is a storyteller, communicating experiences and ideas effectively through language and media. An explorer has literacy skills, interpreting and creating new understanding from spoken language, writing, and a wide variety of visual and audio media.

COLLABORATION An explorer works effectively with others to achieve goals.

PROBLEM SOLVING An explorer is able to generate, evaluate, and implement solutions to problems. An explorer is a capable decision maker—able to identify alternatives and weigh trade-offs to make a well-reasoned decision.

KNOWLEDGE



THE HUMAN JOURNEY An explorer understands where we came from, how we live today, and where we may find ourselves tomorrow.

OUR CHANGING PLANET An explorer understands the amazing, intricate, and interconnected systems of the changing planet we live on.

WILDLIFE AND WILD PLACES An explorer reveals, celebrates, and helps to protect the amazing and diverse creatures we share our world with.

Kindergarten Standard Supported

- **CCSS Reading Informational Text:** With prompting and support, ask and answer questions about key details in a text. (K-1)

First Grade Standard Supported

- **CCSS Reading Informational Text:** Ask and answer questions about key details in a text. (1-1)

What You Will Need

- “Seasons Change” (*Young Explorer*)
- Think Sheet (English and Spanish) (pages 5–6)
- Pencils

CONNECT & ENGAGE (5 minutes)

Display page 3 of “Seasons Change” in the digital magazine.

Oh! Look at those cute animals in the picture! What kind of animal do you think they are? The title is “Seasons Change,” so that doesn’t tell us what they are. I’m going to read the text to see if that helps us.

Read the text under the title.

What did we learn? What kind of animal is pictured in the photo?

Kids should share that the animals are arctic foxes.

What else did we learn from the text?

Guide kids to understand that arctic foxes are born in the spring and their fur is dark. Tie in the title to the main idea of the article, which is hinted at in the text.

The text said the fox’s fur will change. What do you wonder about that? Do you think it has anything to do with the title “Seasons Change”? Turn and talk about that, and let’s keep your thoughts, questions, and wonderings in mind as we read on.

Kids turn and talk.

MODEL (10 minutes)

Display the next page of “Seasons Change.”

As I read the next page of the article “Seasons Change,” I’m going to jot down my new learning on the chart I made. I’ll put my new learning in the first column, which is labeled “I Learned.”

Read aloud the page.

Well, I learned a few things by reading this page. I’m going to write these statements and put them in the “I Learned” column in the chart.

- In summer, the fox has brown fur.
- The fur is thin.
- Thin fur helps the fox stay cool.

When we learn new things, we often have questions or things we wonder about. Here are some of the things I wonder about my new learning:

- I learned that in spring and summer the fox’s fur is brown. I wonder about the other seasons. Is the fox’s fur different in the other seasons?
- I learned that in the summer its fur is thin. I wonder if that changes, too.

I’m going to write my wonderings in the “I Wonder” column in the chart. Do you have any other wonderings about the arctic fox? Turn and talk about any wonderings you have.

Kids turn and talk.

GUIDE (10 minutes)

Make sure kids have access to their own Think Sheets. Display the next page of “Seasons Change.”

Let’s try this together now. You’ve each got a Think Sheet with a chart that has a column for writing what you learned and a column for writing what you wonder.

Look at the picture on the page as I read the text. If you learned something new, write or draw your new learning on your Think Sheet in the “I Learned” column.

Kids might draw or write the following as their new learning:

Scout

- In the fall, the days get cooler.
- The fox has brown and white fur.
- The white fur is thick, and it helps the fox stay warm.

Voyager

- In the fall, the days get shorter and cooler.
- The fox’s fur changes color.
- The fur grows thicker and helps the fox stay warm.

Good work! We learned a lot more about the arctic fox from this page. I’m sure there are things you still wonder, too. Turn and talk about that, and then write or draw what you wonder in the “I Wonder” column on your Think Sheet.

Kids turn and talk and then write or draw on their Think Sheets.

Here is a brief list of some things kids might wonder:

- I wonder what the fox will look like in winter.
- I wonder how long it takes for the white fur to grow in.
- I wonder why the thick fur is white instead of brown.

COLLABORATE (25 minutes)

Now, with a partner, turn to the next page in the article and look at the picture as I read the text aloud. When I finish reading, turn and talk with your partner about what you learned and what you still wonder. Then write or draw what you learned and wonder on your Think Sheets.

Kids partner up to work together. Read aloud the text. Then confer with partner groups.

Kids might draw or write the following as their new learning:

- In winter, days are short and cold.
- Snow covers the ground.
- The foxes now have white fur.
- The white fur helps them hide.

Here is a brief list of some things kids might wonder:

- I wonder how warm that white fur is.
- I wonder if the white fur goes away when the spring comes again.
- I wonder if in the spring the fur looks like it did in the fall, with some white and some brown fur.

SHARE THE LEARNING (10 minutes)

Who would like to share something they learned and something they still wonder about the arctic fox and the change of seasons? Before we start, remember that we always share politely with the class. First, share what you learned and wonder about. When you are finished sharing, always ask if there are any questions or comments. Then politely call on someone else who would like to share with the class.

Allow time for kids to share their learning.

We learned a lot about the arctic fox, didn’t we? And yet, there is still so much to wonder about. That’s the great thing about reading. It keeps us curious about the things we learn, which starts us on a path to find out more. Do you know one thing I don’t wonder about? I don’t wonder if you did an awesome job today. I know you did!

Name _____

Date _____

THINK SHEET

Write or draw what you learned. Write or draw what you still wonder.

I LEARNED	I WONDER

HOJA DE PENSAR

Escribe o dibuja lo que has aprendido.

Escribe o dibuja lo que todavía te preguntas.

HE APRENDIDO	ME PREGUNTO

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
- Pencils

CONNECT & ENGAGE (5 minutes)

Display the first page(s) of the article.

Wow! Look at that picture! What is it? The title is "_____." Does that help us at all? If so, maybe we can guess what the picture is. Has anyone ever seen _____? If you have, tell us what you already know about _____. If you haven't, turn and talk about what you notice about the picture.

Kids turn and talk and then share out.

MODEL (10 minutes)

Display the next page(s) of the article.

As I read these pages," I'm going to jot down my new learning on the chart I made. I'll put my new learning in the first column, which is labeled "I Learned."

Read page(s) _____.

Well, I learned a few things by reading the page(s). I'm going to write these statements and put them in the "I Learned" column in the chart.

Write what you learned in the chart.

When we learn new things, we often have questions or things we wonder about. Here are some of the things I wonder about my new learning. I'm going to write these in the second column of the chart. That column is labeled "I Wonder."

Write what you wonder in the chart.

GUIDE (10 minutes)

Make sure kids have access to their own Think Sheets. Display the next page(s) of the article.

Let's try this together now. You've each got a Think Sheet with a chart that has a column for writing what you learned and a column for writing what you wonder.

Look at the pictures on page(s) _____ as I read the text. If you learned something new, write or draw your new learning on your Think Sheet in the "I Learned" column.

Kids write or draw their new learning on their Think Sheet.

Good work! We learned a lot more about _____. I'm sure there are things you still wonder, too. Turn and talk about that, and then write or draw what you wonder in the "I Wonder" column on your Think Sheet.

Kids turn and talk and then write or draw on their Think Sheets.

COLLABORATE (25 Minutes)

Now, with a partner, look at the picture(s) on page(s) _____ as I read the text aloud. When I finish reading, turn and talk with your partner about what you learned and what you still wonder. Then write or draw what you learned and wonder on your Think Sheets.

Kids partner up to work together. Read page(s) _____. Then confer with partner groups.

Kids write or draw what they learned and what they wonder about on their Think Sheets.

SHARE THE LEARNING (10 minutes)

Let's get together and talk about what we learned. I learned that having a question in mind as we read keeps us focused and helps us think as we read. Who else would like to share something they learned? You can share something you drew or wrote on your Think Sheet.

Who would like to share something they learned and something they still wonder about _____? Before we start, remember that we always share politely with the class. First, share what you learned and wonder about. When you are finished sharing, always ask if there are any questions or comments. Then politely call on someone else who would like to share with the class.

Allow time for kids to share their learning.

We learned a lot about _____, didn't we? And yet, there is still so much to wonder about. That's the great thing about reading. It keeps us curious about the things we learn, which starts us on a path to find out more. Do you know one thing I don't wonder about? I don't wonder if you did an awesome job today. I know you did!

Standards Supported

- **NGSS ESS2.D: Weather and Climate:** Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (K-ESS2-1)
- **NGSS LS1.D: Information Processing:** Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. (1-LS1-1)

What You Will Need

- Interactive Digital Magazine
- Science Master (English and Spanish) (pages 10–11)

SCIENCE BACKGROUND

As its name implies, the arctic fox lives in the Arctic. It has adapted to survive in this treeless land, where temperatures can drop as low as -58°F (-50°C).

To survive here, the fox has furry soles, short ears, and a short muzzle. It lives in burrows and may dig a tunnel in snow to create a shelter during a blizzard.

But the Arctic isn't always white and snowy. And as its landscape changes, the arctic fox does, too. In winter, the fox's thick white fur provides warmth and camouflage in the bright white snow. As spring approaches, its coat turns dark. By summer, thin, brown fur keeps the fox cool and helps it blend in with the rocks and plants on the ground. In fall, as the days grow shorter and cooler, the fox's fur grows thicker and begins to turn white once again. By the time winter arrives, the fox is ready to blend into the snow-covered landscape once again.

ENGAGE

Display an assortment of photos taken at different times of year in areas where the climate has four seasons: spring, summer, fall, and winter. Have students sort the photos by season. Encourage them to identify clues that helped them sort the photos correctly.

EXPLORE

Display the "Seasons Change" article with the interactive digital magazine. Read aloud the headline and text on the opening pages. Encourage students to brainstorm ideas about how and why the arctic fox's fur will change. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, have students turn and talk with a partner to discuss what they learned about seasons and the arctic fox. Ask: **What happens to an arctic fox's fur when the seasons change?** (*It changes.*) **How?** (*It changes color. It may get thicker or thinner.*) Point out that this is one way the arctic fox responds to changing seasons. Ask: **How do changes in the fox's fur help the fox survive?** (*Possible responses: The change in color helps the fox blend in with its environment. The change in thickness helps the fox stay cool in summer and warm in winter.*) Have students examine the photo of the foxes in winter. Poll the class to see what students think the fox's fur will be like when spring, the next season, arrives.

ELABORATE

Display photos of other animals whose fur changes with the seasons. Invite students to describe the changes they see and explain how these changes help the animals survive. Then review the Words to Know feature for this issue. Which words come from this article? Challenge students to create sentences with each word.

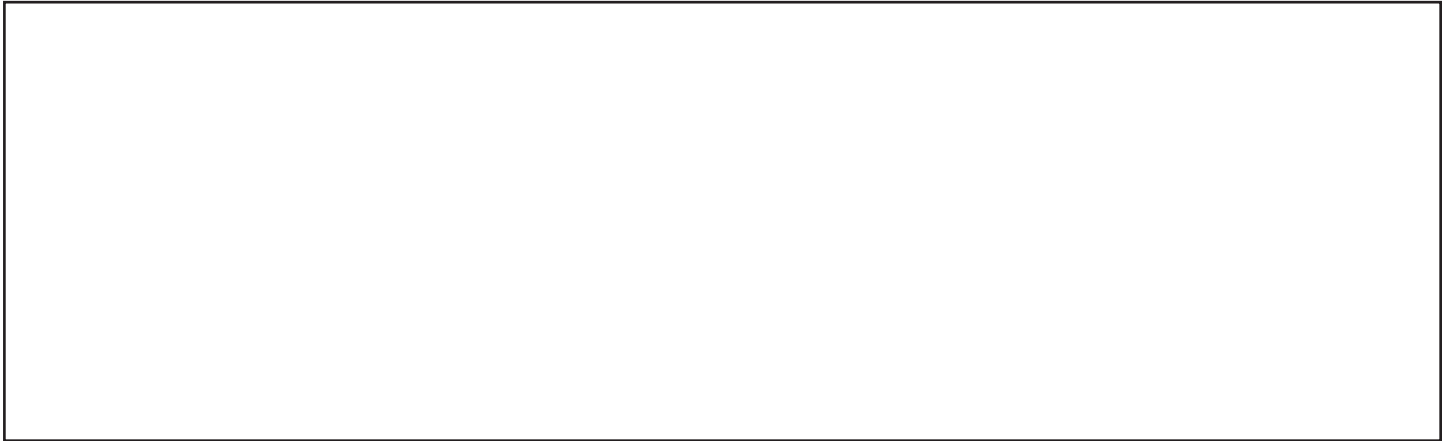
EVALUATE

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

SCIENCE: SEASONS CHANGE

Pick a season. Draw a picture of an arctic fox.

Show what the fox looks like during that season.



Look at your picture. Circle or write an answer to each question.

1. Which season did you draw? spring summer fall winter

2. How did you show this?

3. What color is the fox's fur in the season in your picture?

 dark brown brown and white white

4. What color will the fox's fur be in the next season?

5. What are the days like in the season in your picture? hot warm cool cold

6. What does the fox's fur help it do in the season in your picture?

CIENCIA: CAMBIOS DE ESTACIÓN

Elige una estación. Dibuja un zorro ártico.

Muestra cómo es el zorro en esa estación.



Mira tu dibujo. Encierra en un círculo o escribe la respuesta a cada pregunta.

1. ¿Qué estación has dibujado? primavera verano otoño invierno

2. ¿Cómo la has dibujado?

3. ¿De qué color es el pelaje del zorro en la estación de tu dibujo?

 oscuro marrón marrón y blanco blanco

4. ¿De qué color será el pelaje del zorro en la siguiente estación?

5. ¿Cómo son los días en la estación que has dibujado?

 calurosos templados frescos fríos

6. ¿En qué le ayuda al zorro su pelaje en la estación de tu dibujo?

Standard Supported

- **C3: Human-Environment Interaction: Place, Regions, and Culture:** Identify some cultural and environmental characteristics of specific places. (D2.Geo.6.K-2)

What You Will Need

- Interactive Digital Magazine
- Social Studies Master (English and Spanish) (pages 13-14)

SOCIAL STUDIES BACKGROUND

Lunar New Year is an annual holiday celebrated in China and other Asian countries. Because it is scheduled according to the lunar calendar, which is based on cycles of the moon rather than Earth's revolution around the sun, its dates vary from year to year.

The festival begins with the first new moon of the lunar calendar. It ends with the first full moon of the lunar calendar, 15 days later.

Before the festivities begin, people clean and decorate their homes. Many decorations are bright red. In the Chinese culture, the color red is believed to bring happiness and wealth and drive off bad luck.

Lunar New Year celebrations take place all over the world. They feature folk art, music, drama, dance, and parades. Foods such as dumplings, rice cakes, and spring rolls are served. People give gifts of money in red envelopes to wish each other good luck.

The Lantern Festival is held on the final day of the holiday. With the full moon shining, people release lighted lanterns and watch as they rise high into the night sky and slowly float away.

ENGAGE

Invite volunteers to identify a holiday they observe and describe how they celebrate it each year. What do they do? Where do they go? Who do they celebrate the holiday with? Guide discussion as students gain an appreciation for each other's holiday traditions.

EXPLORE

Display the "Dancing Dragons" article with the interactive digital magazine. Read aloud the headline and text on the opening pages. Brainstorm ideas about what the Lunar New Year is. Encourage students to describe how people celebrate from what they see in the photos. 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 people around the world celebrate many different holidays. One of the biggest celebrations in China and many other Asian countries is Lunar New Year. Have students turn and talk as they discuss how people in China celebrate this holiday. Encourage them to use what they read and saw in the photos to describe how people of all ages can participate in the festivities. Based on what they know about their own holiday celebrations, have students brainstorm a list of other things that might be part of this annual event, such as food, games, stories, or gifts.

ELABORATE

Inform students that Lunar New Year isn't held on January 1 like New Year's Eve. It begins with the first new moon of the year and ends 15 days later with the first full moon. As a class, review these phases of the moon. Challenge students to identify other celebrations that last for more than one day.

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.

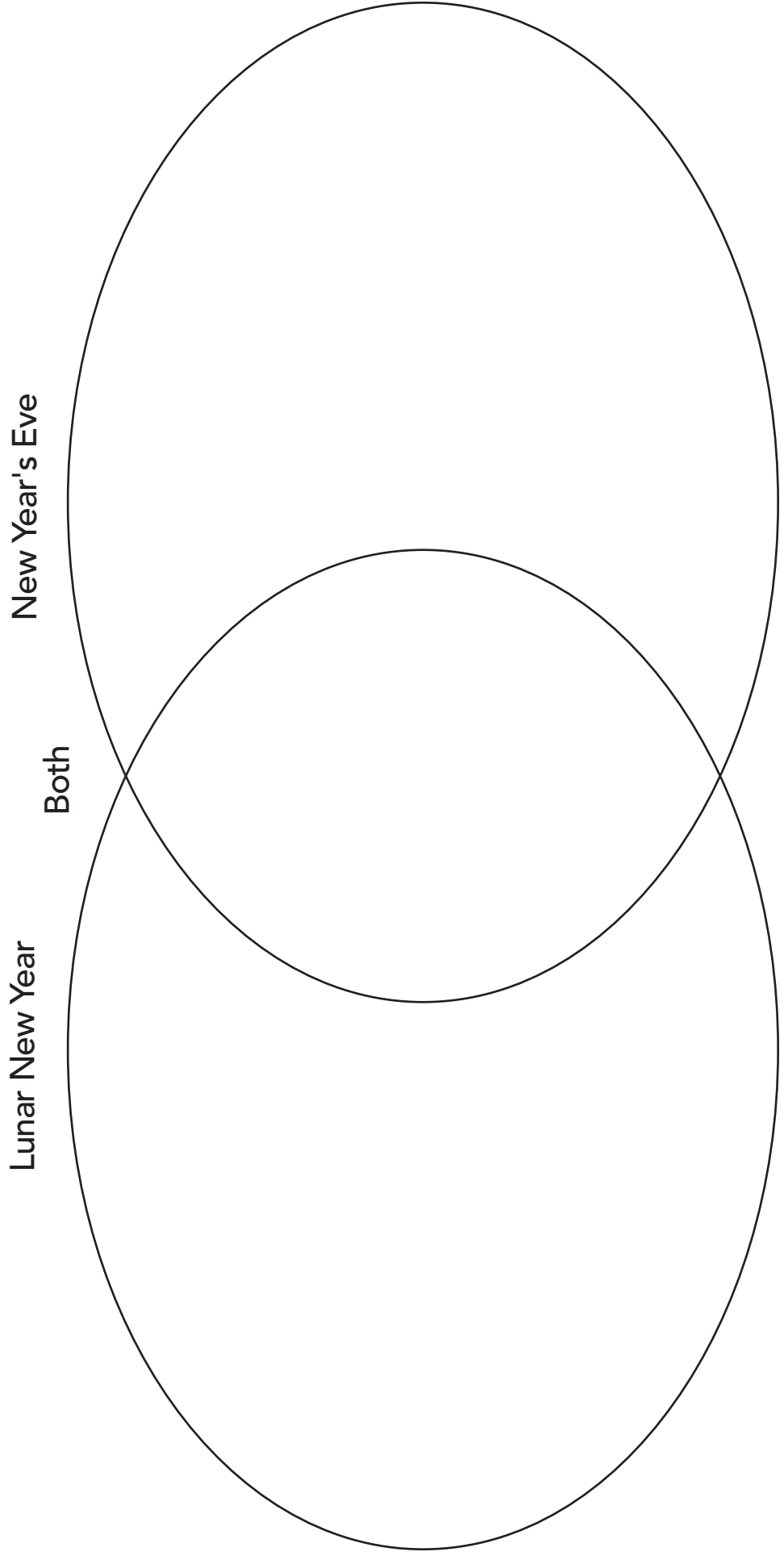
Name _____ Date _____

SOCIAL STUDIES: DANCING DRAGONS

Think about how people in China celebrate Lunar New Year.

Think about how you celebrate New Year's Eve.

Draw or write to show or tell how the holidays are alike and different.



Nombre _____ Fecha _____

ESTUDIOS SOCIALES: BAILE DE DRAGONES

Piensa en cómo se celebra en China el Año Nuevo Lunar.

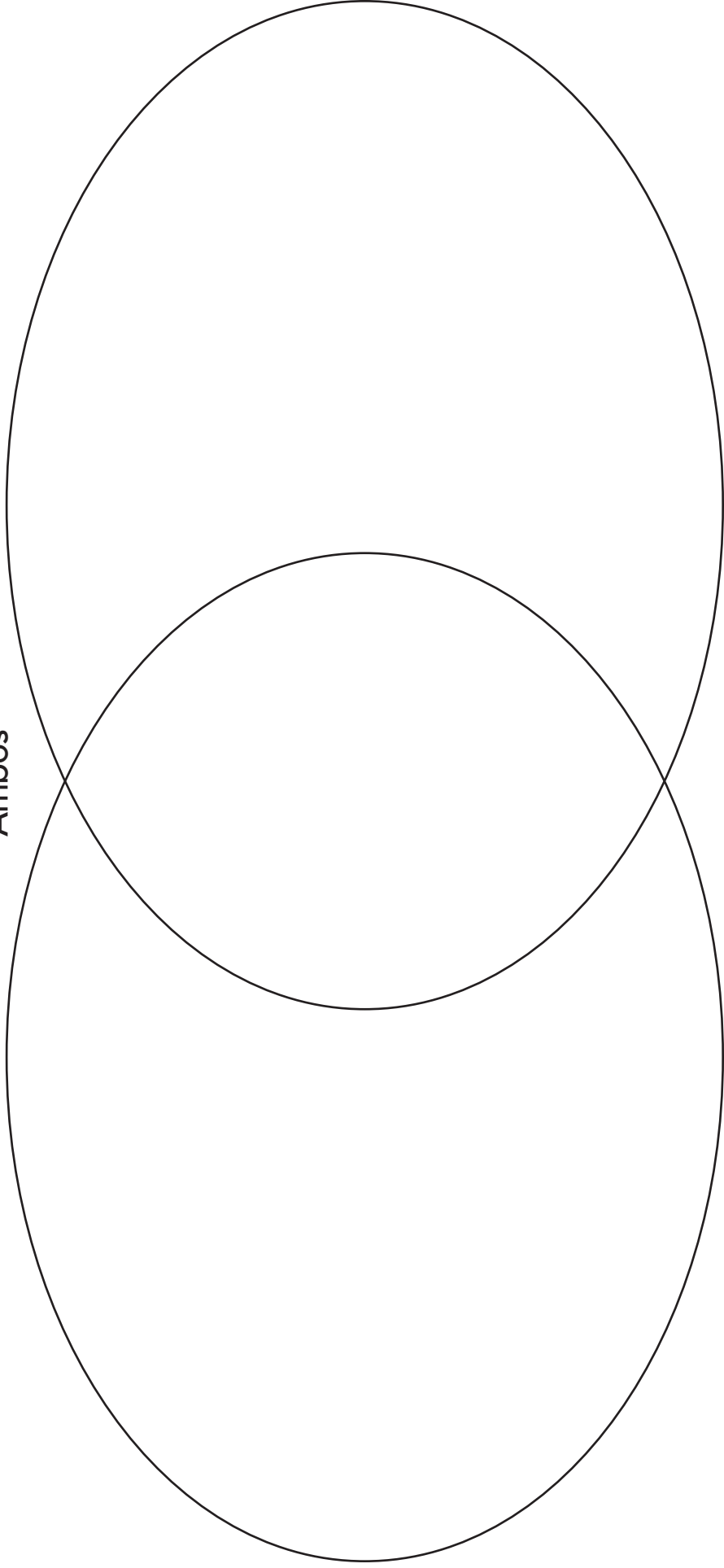
Piensa en cómo celebras tú el Año Nuevo.

Dibuja o escribe algo que muestre o cuente los parecidos y diferencias de ambas fiestas.

Año Nuevo Lunar chino

Ambos

Tu Año Nuevo



Standard Supported

- **C3: Taking Informed Action:** Identify and explain a range of local, regional, and global problems, and some ways in which people are trying to address these problems. (D4.6.K-2)

What You Will Need

- Interactive Digital Magazine
- Social Studies Master (English and Spanish) (pages 16–17)

SOCIAL STUDIES BACKGROUND

In 2016, a flamingo flew into a hotel window on the island of Curaçao. Veterinarian Odette Doest took him under her care.

The bird had suffered a concussion. But Doest noticed that the flamingo was also very relaxed around people. And it had a foot disease that would have made it hard for it to catch food in the wild. These were signs that the flamingo had been domesticated, and it would not have survived if it had been released back into the wild.

Doest decided to keep the flamingo, which she named Bob, as an educational animal. The two began making weekly visits to schools and other groups.

At these visits, people get the rare opportunity to see a flamingo up close. With Bob's help, Doest teaches people about flamingos, other wildlife, and how people can work together to protect the environments where the animals live.

ENGAGE

Tell the class that people teach animals many things. For example, people teach dogs different skills and tricks. Inform students that animals can help teach people things, too. Invite volunteers to name an animal and describe what they wish the animal could teach them. Possible responses may cover something the animal does, how it survives, or what it is like where the animal lives.

EXPLORE

Display the "Flamingo Bob" article with the interactive digital magazine. Invite students to examine the article's photos. Ask: **Based on what you see, how is Bob different from most flamingos?** Encourage students to share their ideas. Then read the article aloud or have students read it in groups, with a partner, or on their own.

EXPLAIN

After reading, invite students to share what they learned about Flamingo Bob. Ask: **Why doesn't Bob live in the wild like other flamingos?** (*He flew into a window and was hurt. He cannot survive in the wild.*) **Who takes care of him?** (*Odette*) **Why does she know so much about flamingos?** (*She is an animal doctor.*) Have students turn and talk as they discuss what Bob and Odette talk to students about (*wild flamingos*), the problem they face (*dirty beaches*), and how the students can help (*keep beaches clean*).

ELABORATE

Remind students that the article described Bob and Odette as a good team. Poll the class to see how many students agree. Ask: **Do you think Odette's lessons would be as effective if she didn't have Bob as her partner?** Invite students to share their thoughts.

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.

SOCIAL STUDIES: FLAMINGO BOB

Bob and Odette teach kids how to help flamingos.

Write a letter to thank them.

Tell how people who live near flamingos can help.

Use as many words in the word box as you can.

flamingo	wild	dirty	beaches	harm
learn	help	keep	clean	team

Handwriting practice lines consisting of solid top and bottom lines with a dashed middle line. There are ten sets of these lines provided for writing the letter.

ESTUDIOS SOCIALES: BOB, EL FLAMENCO

Bob y Odette enseñan a los niños cómo ayudar a los flamencos.

Escribe una carta dándoles las gracias.

Cuenta cómo puede ayudar la gente que vive cerca de los flamencos.

Usa tantas palabras del recuadro como puedas.

flamenco	salvaje	ensuciar	playas	dañar
ayudar	mantener	limpiar	equipo	

Handwriting practice lines consisting of a solid top line, a dashed middle line, and a solid bottom line. There are 10 sets of these lines provided for writing.

LANGUAGE ARTS

Think Sheet, page 5

Students should write or draw what they learned and what they still wonder.

SEASONS CHANGE

Science: page 10

Drawing: Students should draw a picture of an arctic fox. The background and color of the fox's fur should accurately reflect the season the student chose to depict.

Questions: Answers will vary depending on which season students depict.

DANCING DRAGONS

Social Studies: page 13

Responses will vary. Students should use information from the article and what they already know to write or draw facts for each section of the diagram.

FLAMINGO BOB

Social Studies: page 16

Students should write a thank you letter that contains one or more words from the word bank. They should write complete sentences that begin with a capital letter and end with proper punctuation.

ARTES DEL LENGUAJE

Hoja de pensar, página 6

Los estudiantes deben escribir o dibujar lo que han aprendido y lo que todavía no saben o se preguntan.

CAMBIO DE ESTACIÓN

Ciencias: página 11

Dibujo: los estudiantes deberán dibujar un zorro ártico. El entorno y el pelaje del zorro debe reflejar con precisión la estación elegida por el estudiante.

Preguntas: Las respuestas variarán según la estación elegida.

BAILE DE DRAGONES

Estudios sociales: página 14

Las respuestas variarán. Los estudiantes deben utilizar la información del artículo y sus conocimientos previos para rellenar el diagrama con palabras o dibujos.

BOB, EL FLAMENCO

Estudios sociales: página 17

Los estudiantes deberán escribir una carta de agradecimiento que contenga una o más palabras del recuadro. Deberán escribir oraciones completas que empiecen con mayúscula y con los signos de puntuación adecuados.