

A Common Core State Anchor
Standards & Next Generation
Science-Aligned
Discussion/Activity Guide

What Makes an Opossum Tick?

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Written by Lyn Smith

Illustrated by Jamie Hogan

Activity Guide Design by Marty Hogan

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When Bailey stumbles across an opossum behind Grandfather's barn, he sees an opportunity to learn more about one of Earth's oldest living fossils, a mammal which dates back millions of years to the days of the dinosaurs.

Guide created by
Debbie Gonzales, MFA



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Pre-Reading Discussion

Consider the book's front cover:

- Identify the animal depicted in the illustration. Describe the animal's physical features. Tell what its nose, ears, whiskers, and eyes look like.
 - Describe the plants surrounding the animal. Where do you think this animal might live? What do you think this animal might eat?
 - The animal in the illustration is an opossum. Tell all that you know about the opossum.
 - Read the title of the book. What does the work 'tick' mean? Explain your answer.
 - Predict what this book is going to be about.
-

Meet the author - Lyn Smith:

- When she was little, her mother saved most of the stories and drawings Lyn's created. Her mother believed that "...all forms of writing and reading were to be savored, enjoyed, and kept." Consider how the support given to Lyn at such an early age contributed to her talent and confidence as a published author today.
- Lyn also works as a literacy coach, a communications director for a large non-profit agency, an elementary school instructional strategist, and as a reading teacher. She's dedicated to helping young children develop a love for reading. Determine how Lyn's childhood experiences helped to develop her passion for literacy.
- Learn more about Lyn's projects and passions by accessing her website at www.lyn-smith.com.



Meet the illustrator - Jamie Hogan:

- Not only has Jamie illustrated for a number of magazines, publications, and children's books, she describes herself as being an "avid motorcyclist and sketchbook keeper." Tell all you know about a sketchbook. Discuss why an illustrator would consider themselves to be a sketchbook keeper.
- Jamie says that she "...draws inspiration from moonlight, reflections, pink clouds, wishing on the first star." Study the illustration on the cover of the book. Identify elements that represent the things that she is inspired by.
- Jamie's website is filled with samples of her illustrations. She also writes a blog in which she shares what it is like to be a prolific illustrator. Find out more about Jamie by accessing her website at www.jamiehogan.com.



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Post-Reading Discussion

*Flung open the car door and step into Grandpa's outstretched arms.
He smells of sunshine and dirt.*

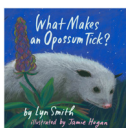
- Describe Bailey's relationship with Grandpa. How does Bailey feel about Grandpa? How do you know?
 - Why has Bailey come to Grandpa's farm? What is the purpose for this visit?
 - What does "sunshine and dirt" smell like? Do you think this "sunshine and dirt" smell is different than the scents Bailey smells at his home? Explain your answer.
-

"Good. No bugs. Oliver's doing a good job keeping this garden healthy and growing."

- This is the first time Grandpa mentions Oliver. Bailey wondered if Oliver was someone that worked with Grandpa. What about you? At this point in the story, did you think Oliver was a farmhand? Explain your answer.
 - Some kinds of bugs are very harmful to garden plants. Describe ways that gardeners take care of pesky bugs.
 - Earlier, Grandpa said that he was not worried about ticks living in the high grass. Do you think that Oliver might have something to do with controlling the tick population on the farm? How so?
-

Staring up from the grass is a small furry triangular face with surprised bright-black eyes.

- Imagine the surprise Bailey must've felt when he discovered the opossum near the compost bin. Tell how you might have felt like in that moment.
- Identify the opossum's distinctive characteristics – its nose, dark eyes, sharp teeth, five-toed paws, and long scaly tail. Consider how these features serve to keep the opossum alive.
- After observing this animal's behavior can you see how the opossum is perfectly equipped to care for Grandpa's garden? Explain your answer.



“Bailey, did you know that an opossum is considered one of the Earth’s oldest surviving animals? It’s an animal that dates back many millions of years to the days of the dinosaurs.”

- Consider reasons why the opossum species, which lived with the dinosaurs over 70 million years ago, are still living and yet the dinosaurs are extinct. Determine why this is so.
- List the physical traits that you feel have allowed the opossum to become one of the oldest surviving animals. Could it be because of their marsupial pouches in which their jelly bean-sized joeys are protected? Is it because they “play dead” when they sense danger? Or could it be because they have 50 very sharp teeth? Explain your answer.

Out the window I whisper. “You’re awesome, Oliver Opossum, a real backyard superhero.”

- Do you agree with Bailey that Oliver Opossum is a backyard superhero? Why or why not?
- List all the facts you learned about the opossum. State one fact that you found to be most surprising, interesting, or fascinating.
- Reconsider the illustration on the cover of the book. Recall your prediction regarding what this book was going to be about. Were you correct? Explain your answer.



Vocabulary Vertical Puzzle

Use the clues below to solve this puzzle. The answers for the puzzle are found on the following page.

1. _____ O _____

2. _____ P _____

3. _____ O _____

4. _____ S _____

5. _____ S _____

6. _____ U _____

7. _____ M _____

1. Thumbs that can be placed against each other to grasp an object
2. A measure of a lifetime
3. Animals that eat both plants and animal matter
4. Animal group in which females with a pouch carry their babies
5. A tail can wrap around a tree branch
6. Active at night
7. Warm-blooded, fur or hair covered animals who give birth to live young



Vocabulary Vertical Puzzle Answers

1. o p p O s a b l e2. s P a n3. o m n i v O r o u s4. m a r S u p i a l5. p r e h e n S i l e6. n o c t U r n a l7. m a M m a l

1. Thumbs that can be placed against each other to grasp an object
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Story Page

Objective: To write an informative/explanatory text examining and conveying ideas and information clearly and accurately.

Materials:

- *What Makes an Opossum Tick?*, the book
- Nature’s Minivan, the template (Guide, pg. 9)
- Pencil
- Markers or colored pencils

Procedure:

- Consider the illustration in the book of the opossum and her babies depicted on the page titled ‘Understanding and Caring for Our Backyard Wildlife’. Guide the students in a discussion about the different physical attributes of the opossum, in particular, the way that the mother carries her young.
- Explore reasons why the female opossum is nicknamed “nature’s minivan.” Make a connection with the picture of a minivan featured below and the opossum’s nickname.
- Following discussion, instruct students to use the **Nature’s Minivan** template to write a short explanatory essay discussing the similarities and differences between the automobile and the animal. Encourage students to consider how being Nature’s Minivan, as well as its physical features, survival skills, and habitat have helped the opossum become one of the longest living species on the planet.
- Use markers or colored pencils to color the picture.
- Encourage students to share their work with the class.



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Nature's Minivan





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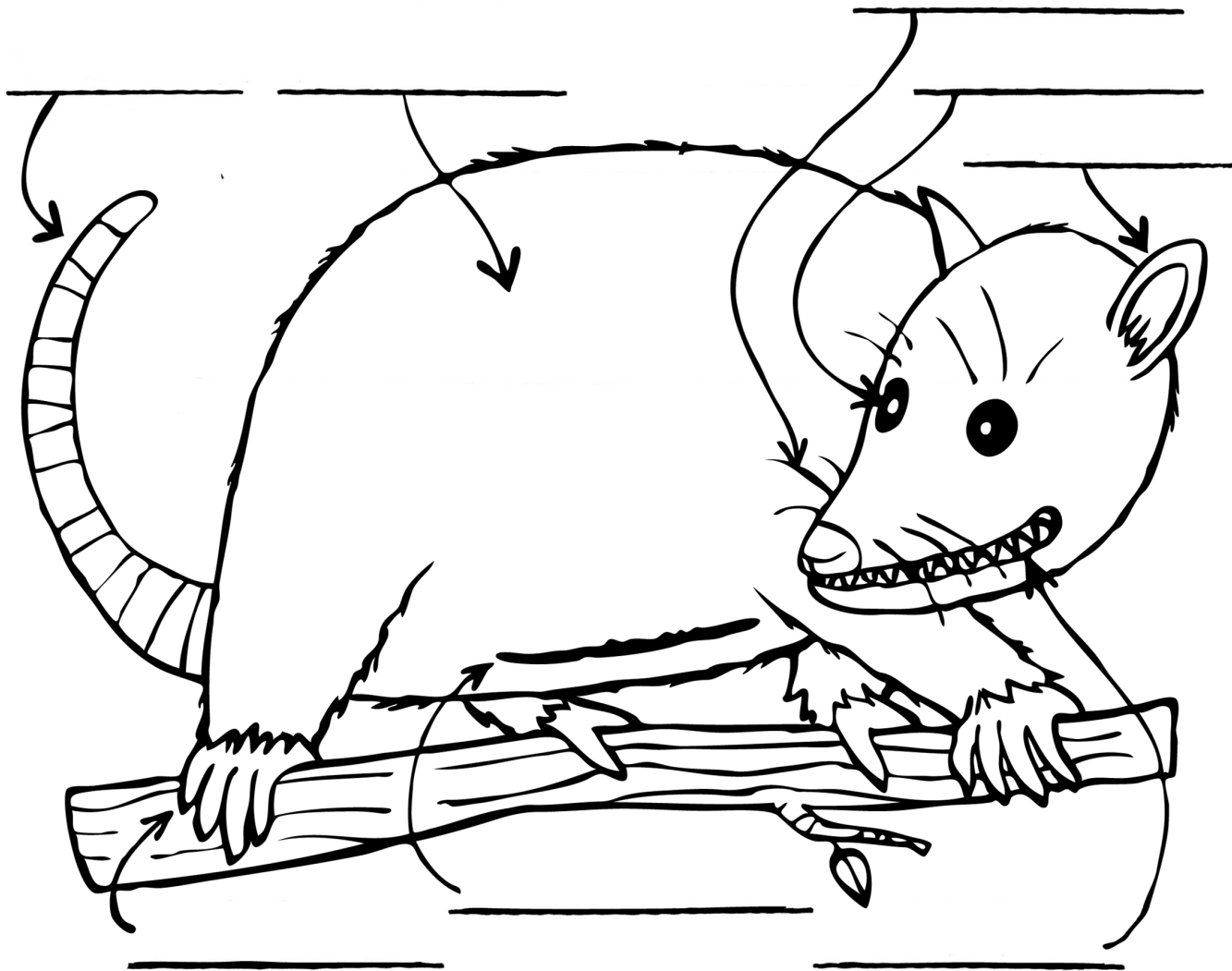
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Parts of the Opossum

Use scissors to cut around the borders of the labels below. Match labels with the corresponding part of the opossum. Use a glue stick or tape to secure label in correct spot. Use markers or colored pencils to color the drawing of the opossum. Share your work with the class.

Answers to this activity are available on the following page.



marsupial pouch

teeth

tail

fur

whiskers

eyes

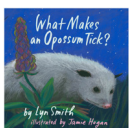
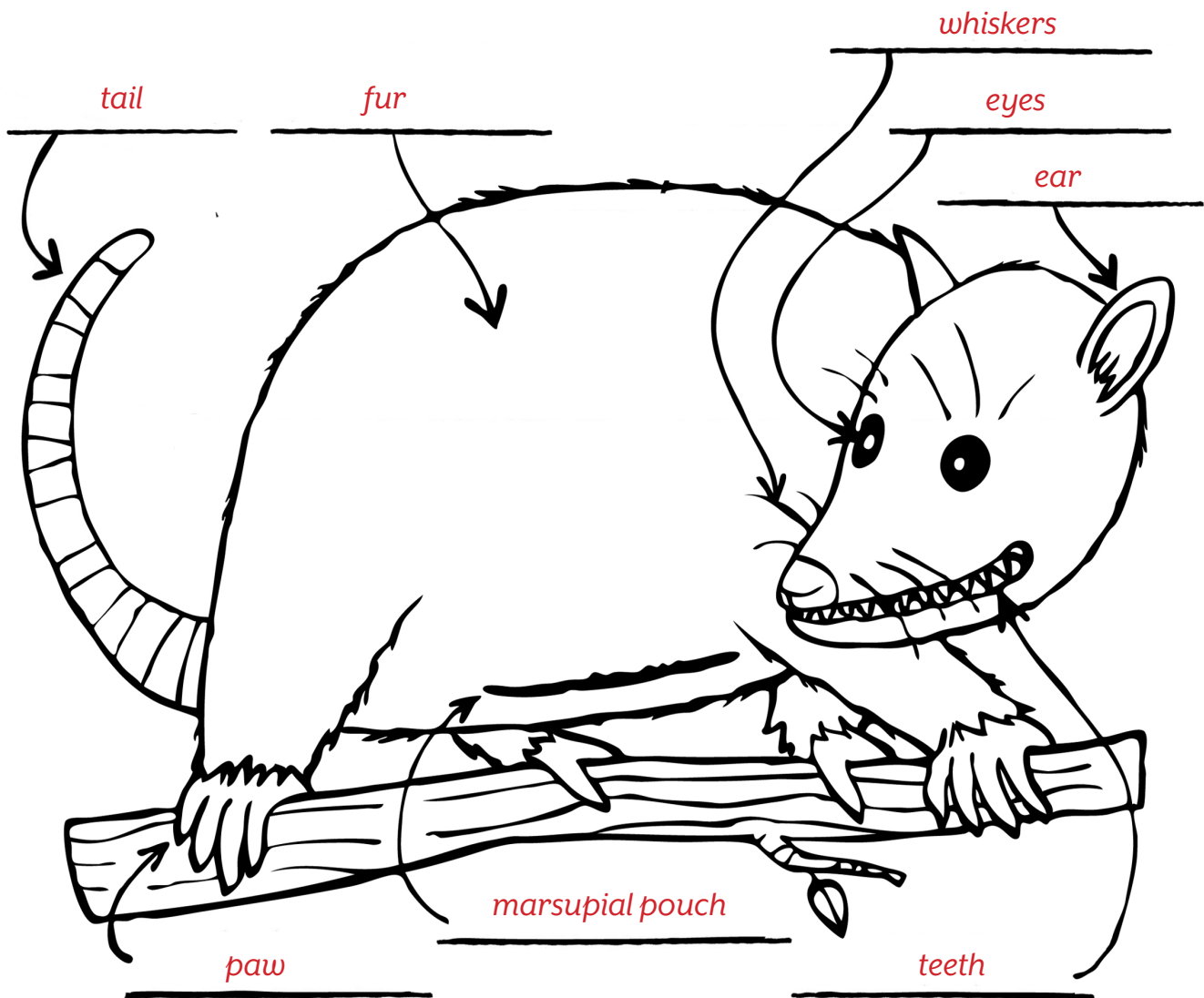
ear

paw



Parts of the Opossum Answer Sheet

Check your matching work with the labelled spaces below.



What Makes an Opossum Tick? Folder Game

Objective: To integrate information presented in diverse media and formats, including visually, and orally.

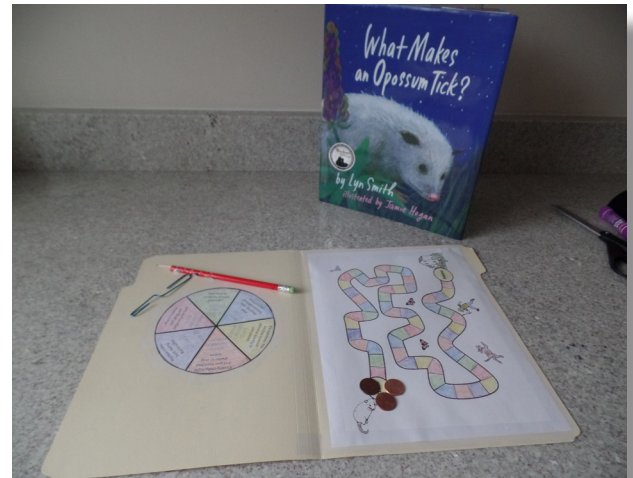
Materials:

- *What Makes an Opossum Tick?*, the book
- Folder Game Cover (Guide, pg. 13)
- Spinner (Guide, pg. 13)
- Game Board (Guide, pg. 14)
- A manila folder
- Pencil
- Large paper clip
- Small game pieces (a penny, a bean, or a small stone, etc.) to use to move about the game board
- Scissors
- Glue stick
- Markers or colored pencils

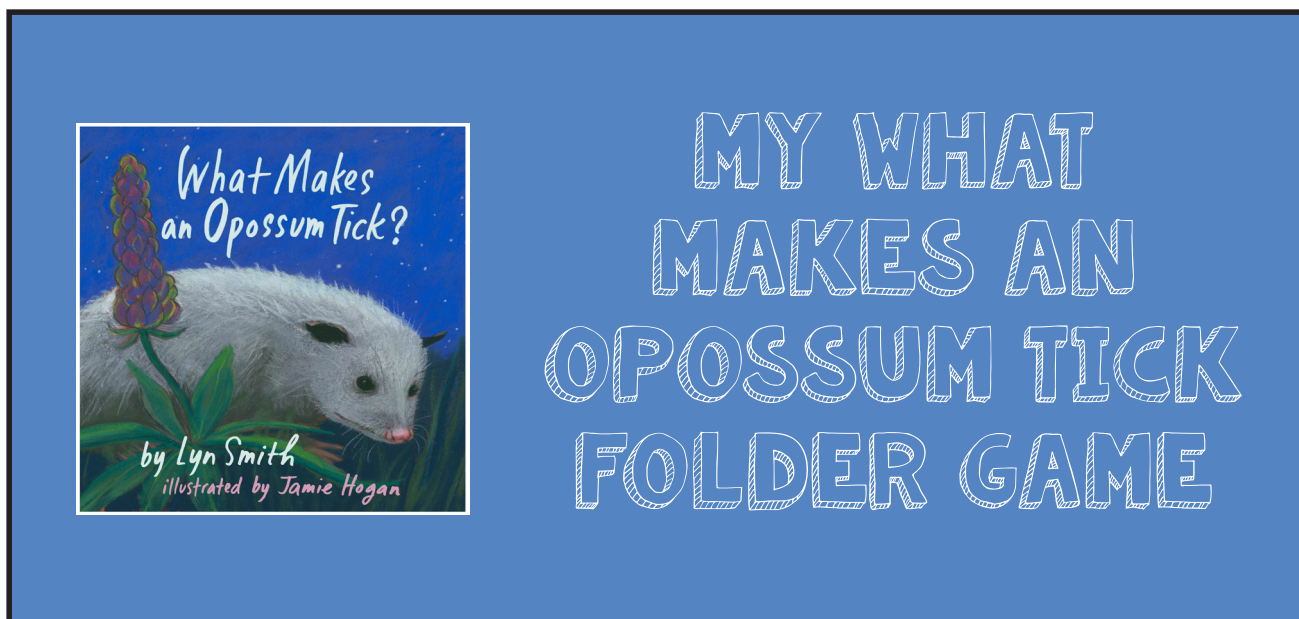


Procedure:

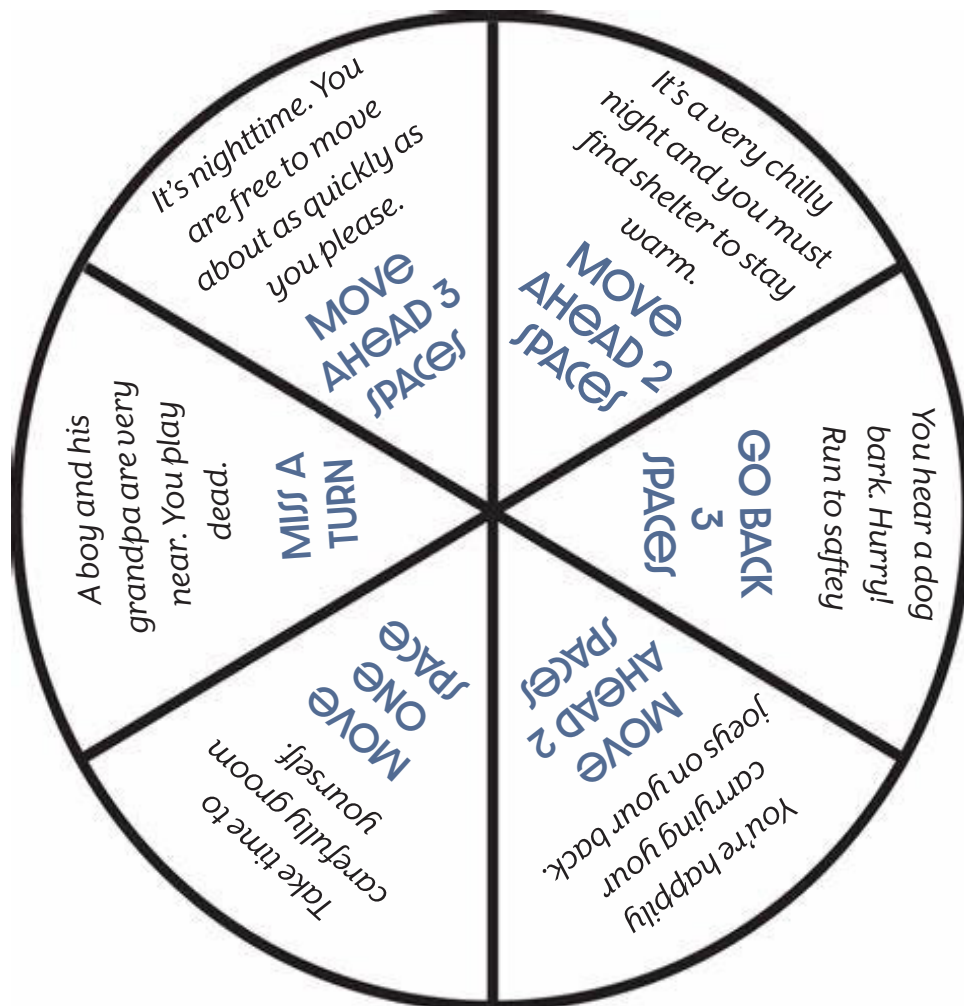
- Print **Folder Game Cover**, **Spinner**, and **Game Board** templates.
- Use markers to color the Spinner and the Game Board template.
- Use scissors to trim around the borders of each template.
- Using glue sticks, secure the templates onto the manila folder. Folder Game Cover goes on the front of the folder, the Spinner and the Game Board on the inside.
- Explain to the students that the purpose of the game is to help the opossum find its way to Grandpa's garden.
- Tell them to place their game pieces on the space labeled 'Start.'
- To use the Spinner, students first open the paperclip flat. Place a curved side of the paperclip over the center of the spinner. Place the point of the pencil on the center point of the circle. Spin the paperclip.
- Follow the instructions described on the Spinner to move across the Game Board.
- Player that reaches Grandpa's house first wins.



Folder Game Cover



Spinner





START!



FINISH!



Common Core State Anchor Standards Alignment

		Discussion	Puzzle	Story Page	Parts of the Opossum	Folder Game
English Language Arts Standards » Anchor Standards for Reading						
CCSS.ELA-Literacy.CCRA.R.1	Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	●	●	●	●	●
CCSS.ELA-Literacy.CCRA.R.2	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	●		●		●
CCSS.ELA-Literacy.CCRA.R.4	Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.	●	●		●	
CCSS.ELA-Literacy.CCRA.R.7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.	●	●	●	●	●
CCSS.ELA-Literacy.CCRA.R.10	Read and comprehend complex literary and informational texts independently and proficiently.	●	●	●	●	●
English Language Arts Standards » Anchor Standards for Writing						
CCSS.ELA-Literacy.CCRA.W.2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.			●		
CCSS.ELA-Literacy.CCRA.W.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		●	●	●	
English Language Arts Standards » Anchor Standards » Anchor Standards for Speaking and Listening						
CCSS.ELA-Literacy.CCRA.SL.1	Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	●		●		●
CCSS.ELA-Literacy.CCRA.SL.2	Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	●	●	●	●	●
CCSS.ELA-Literacy.CCRA.SL.4	Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	●	●	●	●	
CCSS.ELA-Literacy.CCRA.SL.5	Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.		●	●	●	●
CCSS.ELA-Literacy.CCRA.SL.6	Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.	●		●		●

Next Generation Science Standards Alignment

3-LS4-3 Biological Evolution: Unity and Diversity						
3-LS4-3:	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	●	●	●	●	●
LS4.A:	Evidence of Common Ancestry and Diversity: Some kinds of plants and animals that once lived on Earth are no longer found anywhere.	●	●	●	●	
LS4.C:	Adaptation: For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)	●	●	●	●	●

