Animals Change the Enviornment COLUMN SILLALES VEESS KINDERGARTEN

LIFE

WEEK 18

Week 18 Storyline: The anchoring phenomenon for this week is a wasp nest. Students will read about how animals can change the environment. They will use this evidence to match changes in the environment to specific animals. This will help them to understand the weekly phenomenon.

Science Standards:

K-ESS2-2: Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

Science and Engineering Practices:

Engaging in Argument from Evidence

Disciplinary Core Ideas:

ESS2.E: Biogeology

Crosscutting Concepts:

Systems and System Models

Integrated Standard Connections:

ELA:

RI.K.1: With prompting and support, ask and answer questions about key details in a text.

W.K.1: Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book.

W.K.2: Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

W.K.7: Participate in shared research and writing projects.

SL.K.3: Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Math:

MP.2: Reason abstractly and quantitatively.

Weekly Phenomenon: Where did this nest come from?

Vocabulary:

environment: the place where things live

Let's Write: Draw a picture of your favorite animal. What does that animal need to be happy?

Weekly Assessment Questions:

1. Matching: Match each animal with where it makes its home.





a.





b.

2. Matching: How does each animal change the environment to make its home?





а





b

Assessment Guide:

	1	2
Science and Engineering Practices		
Engaging in argument from evidence	х	
Disciplinary Core Ideas		
ESS2.E: Biogeology Plants and animals can change their environment.	х	х
Crosscutting Concepts		
Systems and System Models		х
DOK	1	1

Well-Being Questions:

- Why is it important to have different plants and animals?
- What would the Earth look like without bugs?



Article Background Information: N/A

Article 1: Animals Change the Environment

Lexile® measure: 10L-200L

Word Count: 9

Animals change the **environment**. They change where they live.

Phenomenon Lesson Plan (15 minutes):

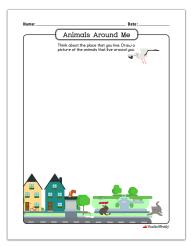
- 1. Engage: Read "Animals Change the Environment" to the students as they follow along. Ask the students what an environment is. (the place where things live)
- 2. Explore: Give each student the graphic organizer <u>Animals Around Me</u>. Tell each student to draw a picture of the animals in their environment.
- 3. Read the weekly phenomenon to the students as they point to the words.
- 4. Watch Video: View the phenomenon video "Wasps Nest."
- 5. Explain/Engaging in Argument from Evidence: Ask the students to describe what they notice about the environment. (Answers will vary.) Ask them where the nest came from. (Answers will vary.) How has an animal changed the environment? (Answers will vary.)

Vocabulary:

environment: the place where things live

Materials/Kit Needed:

Graphic organizer <u>Animals Around Me</u>



Online Related Media (Explore More):

Video "Wasps Nest"

Article Background Information: N/A

Article 2: Animals and Plants (taught with "Animals and the Ground" and "Animals and

Water")

Lexile measure: 10L-200L

Word Count: 18

Animals eat plants. Sheep eat a lot of grass. They can eat grass until the land is bare.

Lesson Plan (30 minutes):

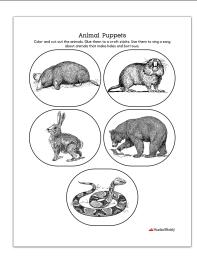
- 1. Engage: Read "Animals and Plants," "Animals and the Ground," and "Animals and Water" to the students as they follow along in the student edition. Ask the students how animals change their environment. (They eat plants, they dig in the ground, and they dig for water.) Ask the students to look at the pictures in their student edition and share how the animals are changing the environment. (Answers will vary.)
- 2. Explore: Prepare a sensory bin with dirt, recycled plastic containers, cardboard tubes, and plastic animals. Give the students time to play in the sensory area by building caves and tunnels for the plastic animals. If appropriate, allow the students to add water to the sensory bin, using small paper cups.
- 3. Explain: Ask the students how playing with the plastic animals changed the environment of the sensory bin.
- 4. Elaborate: Give each student the graphic organizer Animal Puppets. Instruct the students to color and cut out the animals and attach them to craft sticks to make puppets. Use the puppets to sing the following song to the tune of "The Ants Go Marchina."
 - a. There is a tunnel in the ground, you see, you see. There is a tunnel in the ground near me, near me. There is a tunnel, a nice round hole. Who could have made it? I think it's a _____. (mole) There's a tunnel here by me.
 - b. There is a tunnel in the ground, you see, you see. There is a tunnel in the ground near me, near me. There is a tunnel, I see them all over! Who could have made them? I think it's a . (gopher) There's a tunnel here by
 - c. There is a tunnel in the ground, you see, you see. There is a tunnel in the ground by me, by me. There is a tunnel, I don't think it's funny! Who could have made it? I think it's a ... (bunny) There's a tunnel here by me.
 - d. There is a tunnel in the ground, you see, you see. There is a tunnel in the ground by me, by me. There is a tunnel, the big one o'er there! Who could have made it? I think it's a ... (bear) There's a tunnel here by me.
 - e. There is a tunnel in the ground, you see, you see. There is a tunnel in the ground by me, by me. There is a tunnel, the ground might break! Who could have made it? I think it's a _____. (snake) There's a tunnel here by me.
- 5. Evaluate/Engaging in Argument from Evidence: Show the students pictures of animals and their habitats from related media. Ask the students to discuss what they see and how an animal has changed the environment. (Answers will vary.)

Vocabulary: N/A

Materials/Kit Needed:

Sensory table, dirt, recycled plastic containers, cardboard tubes, plastic animals, small paper cups of water, craft sticks

Graphic organizer <u>Animal Puppets</u>



Online Related Media (Explore More):

Images: Chipmunk, Marmot, Wild Bee, Red Panda

Article Background Information: N/A

Article 3: Animals and the Ground (taught with "Animals and Plants" and "Animals and

Water")

Lexile measure: 10L-200L

Word Count: 15

Some animals dig holes. A badger digs a hole. The hole becomes the badger's home.

Lesson Plan: N/AVocabulary: N/A

Materials/Kit Needed: N/A

Online Related Media (Explore More): N/A

Article Background Information: N/A

Article 4: Animals and Water (taught with "Animals and Plants" and "Animals and the

Ground")

Lexile measure: 10L-200L

Word Count: 18

Animals dig for water. An elephant can dig for water. Other animals drink the water the

elephant found.

Lesson Plan: N/AVocabulary: N/A

Materials/Kit Needed: N/A

Online Related Media (Explore More): N/A

Article Background Information: N/A

Article 5: Animals and Seeds Lexile measure: 10L-200L

Word Count: 19

Animals move seeds. Seeds can stick to an animal's fur. Some animals bury seeds. What happens to the seeds?

Lesson Plan (30 minutes):

- 1. Engage: Direct the students' attention to the picture of the animal in the student edition. Ask the students how the animals are moving seeds. (Answers will vary.) Ask the students what will happen to the seeds. (Answers will vary.)
- 2. Explore: Before the lesson, hide enough plastic Easter eggs in the classroom (or outside) that each student will be able to find at least two. You may wish to use another small toy or object. You may wish to create a map so that you can find the objects again. Tell the students that you were pretending to be a squirrel, hiding food in the classroom. Now it is winter time, and you need to find all of the food. You can't remember where you put it all. Ask the students to try to find two objects and bring them to the front of the classroom.
- 3. Explain: Ask the students if they think they found all of the objects. (Answers will vary.) Tell the students that squirrels don't usually find all of the seeds and nuts they hide. What will happen to those seeds and nuts? (Answers will vary.) Use the map to show the students any objects they did not find.

Vocabulary: N/A

Materials/Kit Needed:Plastic easter eggs

Online Related Media (Explore More): N/A

Article Background Information: N/A

Article 6: Animals and the Environment

Lexile measure: 210L-400L

Word Count: 17

Animals use what is around them. An octopus makes a shelter. It uses anything it can find.

Lesson Plan (30 minutes):

- 1. Engage: Read the article to the students. Ask the students how an octopus changes the environment. (It uses things in the environment to build a shelter.)
- 2. Show the students the pictures of animals from related media. Ask the students how animals have used the environment. (The chimp uses a stick as a tool; the crab uses its environment to decorate its shell; the reduvius personatus, or masked hunter, camouflages itself with dust; the termites build a mound.)

3. Explore: Prepare a set of letter cards. Tell the students they will pretend to be an octopus, collecting materials for its shelter. Call up a small group of three to five students. Toss the letter cards into the air or use a fan to blow them into the air. Tell the students to "swim" and catch as many letters as they can with their "tentacles." Any letters that touch the floor do not count. Tell the students to lay out their letters in a line and name them as quickly as possible. Continue playing with a new group of students for as long as time permits.

Vocabulary: N/A

Materials/Kit Needed:

Letter cards

Online Related Media (Explore More):

Images: Chimp Using a Stick as a Tool, Crab Decorating it's Shell, Reduvivius Personatus, Termites Building Mound

Article Background Information: N/A

Article 7: Bugs and the Environment (taught with "What Change Do You See?")

Lexile measure: 210L-400L

Word Count: 15

Bugs change the environment. Bees fly from flower to flower. They help new flowers grow.

Lesson Plan (30 minutes):

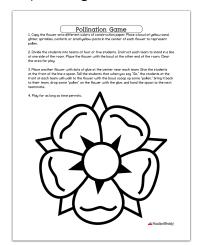
- 1. Read "Bugs and the Environment" to the students as they follow along. Ask the students how bugs change the environment. (They help flowers grow.)
- 2. Explore: Give each student flowers, paintbrushes, a magnifying glass, and white paper. Give the students an opportunity to explore moving the pollen from the flower to the white paper using the paintbrush. Tell the students to use the magnifying glass to look closely at the pollen.
- 3. Explain: Show the students pictures of bees, from related media. Discuss the students' observations. (Answers will vary.)
- 4. *Elaborate*: Tell the students they are going to play a game to show how plants and animals affect the environment.
 - a. Copy the flower from the graphic organizer <u>Pollination Game</u> onto different colors of construction paper. Place a bowl of yellow sand, glitter, sprinkles, confetti, or small yellow pasta in the center of each flower to represent pollen.
 - b. Divide the class into teams of four or five students. Instruct each team to stand in a line at one side of the room. Place the flower with the bowl at the other end of the room. Clear the area for play.
 - c. Place another flower with dots of glue at the center of the room, near each team. Give the students at the front of each line a spoon. Tell the students that when you say, "Go," the students at the front of each team will walk to the flower with the bowl, scoop up some "pollen," bring it back to their team, drop some "pollen" on the flower with the glue, and hand the spoon to the next teammate.
 - d. Play for as long as time permits.

- 5. Evaluate/Engaging in Argument from Evidence: Read "What Change Do You See?" Ask the students to construct an argument to explain how the dog changes the environment. (Answers will vary.) Tell the student that discussing how the dog changes the environment is an example of the crosscutting concept Systems and System Models.
- 6. Return to the weekly phenomenon. What animal has changed the environment? (Answers will vary.) In what way did they change it? (Answers will vary.)

Vocabulary: N/A

Materials/Kit Needed:

Construction paper, flowers, paintbrushes, magnifying glasses, white paper, bowls of yellow sand; glitter; sprinkles; confetti; or small yellow pasta, liquid glue, spoons Graphic organizer Pollination Game



Online Related Media (Explore More):

Images: Bee, Bee on Flower

Article Background Information: N/A

Article 8: What Change Do You See? (taught with "Bugs and the Environment")

Lexile measure: 210L-400L

Word Count: 15

What changed? How did the dog change the environment? Write about the change you

see.

Lesson Plan: N/A
Vocabulary: N/A

Materials/Kit Needed: N/A

Online Related Media (Explore More): N/A

Name _____

Date _____

Studies Weekly Science - Kindergarten

Animals Change the Environment

Week 18 Assessment

1. Match each animal with where it makes its home.









2. How does each animal change the environment to make its home?







