

Smith Farm Elementary Lesson Plan

Teacher Name: Edwards	Grade Level: 4th Grade	Subject: Science
Date: October 10-14	Standards: 4.L.1.1 Give examples of changes in an organism's environment that are beneficial to it and some that are harmful. 4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.	

We will alternate between Science and Social Studies this year. This is a science week.

	Monday, October 10	
Standards-aligned Materials and Resources: (Textbooks, websites)	<ul style="list-style-type: none"> • Chart paper • Animal Studies STC Kit 	
Clear Learning Goals (I Can statements):	I can use my observation skills to describe fiddler crabs, African dwarf frogs, and millipedes.	
Vocabulary	zoologist, observation	
Build Background	Turn and Talk: How do you think animal scientists, or zoologists, learn about animals? What tools do you think are needed to observe animals?	
Direct Instruction (Teacher led)	<p>Today we are going to begin using our animal studies STC kit!</p> <p>After the turn and talk, students will share what they talked about with their partner. Explain that today we will begin our initial observations of the fiddler crabs, African dwarf frogs, and millipedes.</p> <p>Before we begin observing our creatures today, we will discuss the importance of writing in science. As a class, we will answer the question: why is writing useful when studying scientific topics? We will discuss why it is important to record observations in science.</p> <p>Afterwards, students will be given the opportunity to observe the creatures in small groups and share with the class what they notice about each.</p>	Time: 5 min.
Student Practice	Students will be given a few minutes to walk around the room and observe each of the creatures. They will be split into small groups and will rotate between the animals.	Time: 25 min.

	<p>As students are observing the animals, they should take notes on their observations in their science notebooks. They can take notice of the animals' habitats, their coloring, their movement, etc. Anything that stands out to them!</p> <p>After the students observe, place 4 sheets of paper on the board, labeled "Frogs," "Crabs," "Millipedes," and "Comparing Frogs, Crabs, and Millipedes."</p> <p>The students will share the observations that they made after watching the animals. Write their observations on the piece of paper that corresponds with the animal they are talking about. Then, students will compare all three of the animals and write these observations on the Comparing sheet of paper.</p>	
Check for Understanding	Ticket Out the Door: Students will write 3-4 sentences about how the crabs, frogs, and millipedes are similar and how they are different.	Time: 5 min.

	Tuesday, October 11	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> • Animal Studies STC Kit • Observation sheet • Drawing sheet 	
Clear Learning Goals (I Can statements):	I can use my observation skills to describe fiddler crabs, African dwarf frogs, and millipedes.	
Vocabulary	observation, movement, characteristic, structure	
Build Background	Turn and Talk: Based on our observations yesterday, what do we already know about the fiddler crabs, African dwarf frogs, and the millipedes? What are some things we can observe for each of the animals?	
Direct Instruction (Teacher led)	<p><i>*The lesson over the next few days will be the same. Students will be rotating between each animal in small groups, making detailed observations about each.</i></p> <p>Explain to students that today they will begin observing the crabs, frogs, and millipedes. Give each student a copy of the observation/drawing sheets (they will all be stapled together). Before students begin observing the animals today, explain to them what their task is and what they should be looking for while observing. Then, split students into 3 groups and each group will go to one of the animals to observe.</p>	Time: 5 min.

<p>Student Practice</p>	<p>Students should be split into 3 groups. There will be a group at each of the three animals. The habitats should be spread out to different areas of the room so students have room to work.</p> <p>For each animal, students will complete two things: they will draw the animal and fill out the observation graphic organizer. This graphic organizer should include the following characteristics that the students should focus on:</p> <ul style="list-style-type: none"> ● Movement (legs) ● Food getting (how they eat) ● Body size, shape, color, covering ● Eyes and other sensory organs ● Methods of protection ● Description of habitat <p>Students should write their observations of these characteristics in their charts.</p>	<p>Time: 25 min.</p>
<p>Check for Understanding</p>	<p>Quick Write: Students will write a few sentences summarizing their observations of the animal they observed today.</p>	<p>Time: 5 min.</p>

	<p>Wednesday, October 12</p>	
<p>Standards-aligned Materials and Resources</p>	<ul style="list-style-type: none"> ● Animal Studies STC Kit ● Observation sheet ● Drawing sheet 	
<p>Clear Learning Goals (I Can statements):</p>	<p>I can use my observation skills to describe fiddler crabs, African dwarf frogs, and millipedes.</p>	
<p>Vocabulary</p>	<p>observation, movement, characteristic, structure</p>	
<p>Build Background</p>	<p>Class Discussion: Think about the observations you have made for the animals so far. What do you think each of them needs to survive in their habitat? How are their needs similar and different?</p>	
<p>Direct Instruction (Teacher led)</p>	<p>Explain to students that today they will continue observing the crabs, frogs, and millipedes. Give each student their copy of the observation/ drawing sheets that they began yesterday. Before students begin observing the animals today, remind them what their task is and what they should be looking for while observing. Then, split students back into their 3 groups and each group will go to one of the animals to observe. Make sure that each group is observing a different animal than yesterday.</p>	<p>Time: 5 min.</p>

Student Practice	<p>Students should be split into their 3 groups. There will be a group at each of the three animals. The habitats should be spread out to different areas of the room so students have room to work.</p> <p>For each animal, students will complete two things: they will draw the animal and fill out the observation graphic organizer. This graphic organizer should include the following characteristics that the students should focus on:</p> <ul style="list-style-type: none"> ● Movement (legs) ● Food getting (how they eat) ● Body size, shape, color, covering ● Eyes and other sensory organs ● Methods of protection ● Description of habitat <p>Students should write their observations of these characteristics in their charts.</p>	Time: 25 min.
Check for Understanding	Quick Write: Students will write a few sentences summarizing their observations of the animal they observed today.	Time: 5 min.

	Thursday, October 13	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> ● Animal Studies STC Kit ● Observation sheet ● Drawing sheet 	
Clear Learning Goals (I Can statements):	I can use my observation skills to describe fiddler crabs, African dwarf frogs, and millipedes.	
Vocabulary	observation, movement, characteristic, structure	
Build Background	Class Discussion: Yesterday we talked about what each of our animals needs to survive. What do you think would be harmful to the animals in their habitats?	
Direct Instruction (Teacher led)	Explain to students that today they will finish observing the crabs, frogs, and millipedes. Give each student their copy of the observation/drawing sheets that they began earlier in the week. Before students begin observing the animals today, remind them what their task is and what they should be looking for while observing. Then, split students back into their 3 groups and each group will go to one of the animals to observe. Make sure that each group is observing a different animal than yesterday.	Time: 5 min.

Student Practice	<p>Students should be split into their 3 groups. There will be a group at each of the three animals. The habitats should be spread out to different areas of the room so students have room to work.</p> <p>For each animal, students will complete two things: they will draw the animal and fill out the observation graphic organizer. This graphic organizer should include the following characteristics that the students should focus on:</p> <ul style="list-style-type: none"> ● Movement (legs) ● Food getting (how they eat) ● Body size, shape, color, covering ● Eyes and other sensory organs ● Methods of protection ● Description of habitat <p>Students should write their observations of these characteristics in their charts.</p>	Time: 25 min.
Check for Understanding	Quick Write: Students will write a few sentences summarizing their observations of the animal they observed today.	Time: 5 min.

	Friday, October 14	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> ● Animal Studies STC Kit ● Observation sheet ● Drawing sheet ● Animal Research paper 	
Clear Learning Goals (I Can statements):	I can use my observation skills to describe fiddler crabs, African dwarf frogs, and millipedes.	
Vocabulary	observation, movement, characteristic, structure	
Build Background	Turn and Talk: Compare your animal observations with the people at your table. Did you notice anything similar or different from your classmates?	
Direct Instruction (Teacher led)	<p>Remind students that over the last few days, they have been observing the Fiddler crabs, African dwarf frogs, and millipedes. Today will be a day for students to finish their observations, or for students who were absent to catch up on their observations.</p> <p>Students who are finished with all three observations will choose an animal that they want to research and will begin filling out the animal research pennants.</p>	Time: 5 min.

Student Practice	<p>Students will either complete their animal observations or begin working an animal research pennant.</p> <p>If students are working on their observations, they will be looking for the following:</p> <ul style="list-style-type: none"> ● Movement (legs) ● Food getting (how they eat) ● Body size, shape, color, covering ● Eyes and other sensory organs ● Methods of protection ● Description of habitat <p>If students are finished with their observations, they will choose an animal to research and begin working in their pennants. They can use Google to look up information about the animal they choose. They will look for the following information:</p> <ul style="list-style-type: none"> ● Description ● Diet ● Habitat ● Adaptations ● Predators/Prey 	Time: 20 min.
Check for Understanding	Quick Write: Write one thing you learned about our animals this week.	Time: 5 min.

Direct Instruction (Teacher led): *Examples - Modeling, providing new vocabulary, questioning, anchor charts, scaffolding, chunking content, etc.*

Student Practice: *Examples - Small group w/ teacher, pairs, individual; graphic organizers, writing prompts, think-pair-share, student-led discussions, student summaries, pictorial notes, mini-projects, etc.*

Check for Understanding: *Examples - ticket out the door, kahoot, white boards, four corners, turn and talk, thumbs up/down, parking lot/Windshield, summative assessment, project, performance, Pear Deck slides, Flipgrid, Padlet, etc.*