

Smith Farm Elementary Lesson Plan

Teacher Name: Edwards	Grade Level: 4th Grade	Subject: Science
Date: October 3-7	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 3	
Standards-aligned Materials and Resources: (Textbooks, websites)	<ul style="list-style-type: none"> • Ecosystem/Biome book • Ecosystem/Biome readings • Chromebook 	
Clear Learning Goals (I Can statements):	I can describe the characteristics of various biomes, including how plants and animals survive there.	
Vocabulary	aquatic, marine, freshwater, biome, ecosystem	
Build Background	Turn and talk: What do you already know about aquatic biomes? What kinds of plants and animals do you think can be found in aquatic biomes?	
Direct Instruction (Teacher led)	<p>Today we will begin learning about different biomes and ecosystems by focusing on aquatic biomes. Before we begin, the students will do a turn and talk to get them thinking about the characteristics of an aquatic biome.</p> <p>After the students share their previous knowledge, I will explain that today we will begin creating a biome book that we will use throughout the week to learn more about the major biomes on Earth.</p> <p>The biomes we will be focusing on today are aquatic biomes, both marine and freshwater. I will remind the students that marine ecosystems refer to the ocean and freshwater ecosystems have a lower salt content.</p>	Time: 5 min.
Student Practice	After we have set up the books, I will explain the task to the students. In a small group, they are going to be researching the characteristics of both marine (ocean) and freshwater ecosystems, as well as finding information about the climate, animals, and plants in these biomes.	Time: 25 min.

	<p>In order to complete this research, each group will be given a reading on aquatic biomes, and they may also use the website linked below.</p> <p>Science for Kids: World Biomes and Ecosystems</p> <p>Once students have finished researching aquatic biomes and have written the information in their books, we will discuss what they have found as a class. We will also talk about how changes in aquatic biomes could affect the animal and plant life.</p>	
Check for Understanding	<p>Quick write: Compare and contrast marine and freshwater ecosystems. How are they similar and how are they different? What kinds of plants and animals can be found in both?</p>	<p>Time: 5 min.</p>

	Tuesday, October 4	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> • Ecosystem/Biome book • Ecosystem/Biome readings • Chromebook 	
Clear Learning Goals (I Can statements):	I can describe the characteristics of various biomes, including how plants and animals survive there.	
Vocabulary	rainforest, tropical, temperate, boreal, biome, ecosystem	
Build Background	<p>Turn and talk: What do you already know about forest ecosystems? What kinds of plants and animals do you think can be found in forest ecosystems?</p>	
Direct Instruction (Teacher led)	<p>Today we will continue working on the biome research that we began yesterday in our books. Our focus for today will be on forest biomes. Before we begin, the students will do a turn and talk to get them thinking about the characteristics of a forest biome.</p> <p>After the students share their previous knowledge, I will remind students that yesterday we created a biome book that will be used to hold our biome research this week. Our focus for today will be on forest biomes, including tropical forests, temperate forests, and boreal forests (taiga).</p> <p>Before the students begin working on their own, I will remind them of their task while they are researching these ecosystems.</p>	<p>Time: 5 min.</p>
Student Practice	In a small group, students will research the characteristics of three ecosystems: tropical forests, temperate forests, and boreal forests (taiga).	<p>Time: 25 min.</p>

	<p>They will also find information about the climate, animals, and plants in these ecosystems.</p> <p>In order to complete this research, each group will be given a reading on forest biomes, and they may also use the website linked below.</p> <p>Science for Kids: World Biomes and Ecosystems</p> <p>Once students have finished researching forest biomes and have written their information in their books, we will discuss what they have found as a class. We will also talk about how changes in forest biomes could affect the animal and plant life.</p>	
Check for Understanding	<p>Quick write: Compare and contrast tropical forests, temperate forests, and boreal forests. How are they similar and how are they different? What kinds of plants and animals can be found in all 3 (if any)?</p>	<p>Time: 5 min.</p>

	Wednesday, October 5	
Standards-aligned Materials and Resources	Early Release Day - No Science	
Clear Learning Goals (I Can statements):		
Vocabulary		
Build Background		
Direct Instruction (Teacher led)		Time: 5 min.
Student Practice		Time: 25 min.
Check for Understanding		Time: 5 min.

	Thursday, October 6	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> ● Ecosystem/Biome book ● Ecosystem/Biome readings ● Chromebook 	
Clear Learning Goals (I Can statements):	I can describe the characteristics of various biomes, including how plants and animals survive there.	
Vocabulary	desert, grassland, nocturnal, prairie, diversity, savanna, temperate	
Build Background	Turn and talk: What do you already know about desert/grassland ecosystems? What kinds of plants and animals do you think can be found in desert/grassland ecosystems?	
Direct Instruction (Teacher led)	<p>Today we will continue working on the biome research that we began earlier this week in our books. Our focus for today will be on desert and grassland biomes. Before we begin, the students will do a turn and talk to get them thinking about the characteristics of a desert or grassland biome.</p> <p>After the students share their previous knowledge, I will remind them that earlier this week, we created a biome book that will be used to hold our biome research. Our focus for today will be on desert and grassland biomes, including deserts, savannas, and temperate grasslands.</p> <p>Before the students go to work on their own, I will remind them of their task while they are researching these ecosystems.</p>	Time: 5 min.
Student Practice	<p>In a small group, students will research the characteristics of three ecosystems: deserts, savannas, and temperate grasslands. They will also find information about the climate, animals, and plants in these ecosystems.</p> <p>In order to complete this research, each group will be given a reading on desert and grassland biomes, and they may also use the website linked below.</p> <p>Science for Kids: World Biomes and Ecosystems</p> <p>Once students have finished researching desert and grassland biomes and have written their information in their books, we will discuss what they have found as a class. We will also talk about how changes in desert and grassland biomes could affect the animal and plant life.</p>	Time: 25 min.

Check for Understanding	Quick write: Compare and contrast desert and grassland ecosystems. How are they similar and how are they different? What kinds of plants and animals can be found in both?	Time: 5 min.
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	Friday, October 7	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> • Ecosystem/Biome book • Ecosystem/Biome readings • Chromebook 	
Clear Learning Goals (I Can statements):	I can describe the characteristics of various biomes, including how plants and animals survive there.	
Vocabulary	polar, arctic, tundra, alpine	
Build Background	Turn and talk: What do you already know about tundra biomes? What kinds of plants and animals do you think can be found in tundra biomes?	
Direct Instruction (Teacher led)	<p>Today we will continue working on the biome research that we began earlier this week in our biome books. Our focus for today will be on tundra biomes. Before we begin, the students will do a turn and talk to get them thinking about the characteristics of a tundra biome.</p> <p>After the students share their previous knowledge, I will remind them that earlier this week, we created a biome book that has been used to hold our biome research. Our focus for today will be on tundra biomes, including arctic and alpine ecosystems.</p> <p>Before the students finish researching on their own, we will work together to complete the World Biomes Map page in our biome books. On this map of the world, we will assign each biome a color and then color in the different biome areas.</p>	Time: 5 min.
Student Practice	<p>After we complete the world biomes map, students will work in small groups to research the characteristics of our last two ecosystems: arctic and alpine. They will also find information about the climate, animals, and plants in these ecosystems.</p> <p>In order to complete this research, each group will be given a reading on tundra biomes, and they may also use the website linked below.</p> <p>Science for Kids: World Biomes and Ecosystems</p>	Time: 10 min.

	Once students have finished researching tundra biomes and have written their information in their books, we will discuss what they have found as a class. We will also talk about how changes in tundra biomes could affect the animal and plant life.	
Check for Understanding	Quick write: Compare and contrast arctic and alpine ecosystems. How are they similar and how are they different? What kinds of plants and animals can be found in both?	Time: 20 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.*

Sample Ecosystem Anchor Chart

