LESSON PLAN

Your Name: Lisa Smith Title of Lesson: Biomes

Grade: 3

STANDARDS

NOTE: Please list at least two complete standards your lesson plan covers. [Common Core State Standards (math and language arts), Next Generation Science Standards (science), Arizona State Social Studies Standards (social studies)].

CCSS.ELA-LITERACY.RI.3.3

Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

CCSS.ELA-LITERACY.W.3.1.B

Provide reasons that support the opinion.

LESSON SUMMARY/OVERVIEW

Provide an overview/synopsis of the lesson and the topics that it will cover.

Students will choose one animal from a biome and research how that animal is connected to other animals and plants. Students will list the possible effects of that animal becoming extinct. As they identify effects they should uncover more cause and effects.

OBJECTIVES

Describe what you want students to know/be able to do as a result of the lesson.

For example, "Students will be able to..."

Students will be able to identify cause and effects of an animal becoming extinct in a biome by completing a graphic organizer and write a paragraph expressing their opinion of what would happen if an animal became extinct.

ASSESSMENT/EVALUATION

What measures will you use to know if you students met the objectives?

- Exceeds Student will identify more than six effects and complete a paragraph expressing their opinion referencing at least two supporting reasons.
- Meets Student will identify six effects and complete a paragraph expressing their opinion referencing at least two supporting reasons.
- Approaching Student will identify at least three effects and complete a paragraph expressing their opinion referencing at least one supporting reason.
- FFB Student will identify at less than three effects and not complete a paragraph expressing their opinion referencing at least one supporting reason.

PREREQUISITE KNOWLEDGE

What will students need to know prior to completing this lesson and how will you access their prior knowledge?

Students will need to know:

- What is a biome?
- How do animals in a biome relate to other living things in the biome?
- What is a food web?

Students will have completed four lessons of a biome unit before this assignment.

MATERIALS

List of required materials.

- Whiteboard and Markers
- A Food Web Diagram
- Food Web Blocks (see Bill Nye video in resources)
- Cards (to put students in groups)
- Graphic Organizer
- Pencils
- Information Sheets on Biomes and Animals
- Paper

VOCABULARY/KEY WORDS

List of key vocabulary terms.

- Biome a large area on earth that has a distinct climate, plants and animals
- Extinct no longer in existence
- Adaptation changes in behavior or structure of plants and animals that help them adjust to changes in the surroundings

TEACHING PROCEDURES

Procedural Steps (Step by step instructions for teaching the lesson):

- "Who can explain to me what a food web is?"
- "Why are they important?"
- "How do they relate to biomes?"
- "Let's build one based on this food web."
- Teacher will choose three or four students to help construct the tower of blocks.
- "What would happen if we removed this living thing?" Teacher will point to a block that if removed will weaken the structure, but not cause it to collapse. Students will respond. Teacher will remove the block.
- "What happened?" (The web is still standing, but weaker.)
- Teacher will continue to remove blocks until structure falls.
- "Does one animal have an impact on the other living things?" Students will respond.
- Teacher will write the word extinct on the whiteboard.
- "Does anyone know what extinct means?" Students will respond. If a correct definition is not given, teacher will define.
- "You are going to learn about an animal and determine what might happen if that animal became extinct. I am going to divide you into five different groups. Each group will be assigned a biome and an animal that lives in that biome. As a group, you will discuss the causes and effects that the extinction of that animal would have on the rest of the biome. Each student will complete a cause and effect sheet. Each student will use their cause and effect sheet to write a paragraph expressing your opinion of what would happen if your animal became extinct. You need to use at least two reasons supporting your opinion. No one's paragraph should be exactly like anyone else's because you are expressing your opinion. You will share your writing with the other students in your group and the group will pick one person to share with the class. Does anyone have any questions?" Teacher will answer any questions posed.
- Teacher will put students into five groups by having them draw a card. Students will pick up a graphic organizer after student chooses a card. Teacher will direct each group to the area they should work in. Teacher will give each group information sheets about the biome and animal their group will be working on.
- "Start by reading about your animal. Then start looking for what other living things in your biome that your animal connects with. It might be something it eats, or something that eats it. Some of the effects could positive or negative. I will be walking around if you have any questions, raise your hands."
- Teacher will monitor and ensure students are working. Teacher will randomly check the graphic organizers to assess the comprehension of the assignment.
- Students will complete the graphic organizer.
- Students will write a paragraph.
- Students will share with their group, then one student from each group will share with the class.
- Teacher will ask students what they learned. Students will respond. "Was any group able to remove their animal without it effecting any other living things in the biome? Why? Can you see how everything is connected? Do you think it is important that humans make an effort to preserve every species?"

RESOURCES

List any references you used to create this lesson. If you borrowed ideas from any lesson plans please note them here. Use APA format.

Bill Nye the Science Guy - Biodiversity. (n.d.). Retrieved from https://www.youtube.com/watch?v=wFyua-0zW48

WAYS OF THINKING CONNECTION

Provide a complete explanation of how your lesson plan connects to futures, system, strategic, or values thinking. Define the way of thinking you selected and used in this lesson plan. Remember, this should be included meaningfully in the lesson plan.

Systems Thinking: analyzing the components of a system and understanding their relationship to one another