**Gibbon Conservation Center**

**Rainforest Network**

4th Grade

Post– Visit Activity

This lesson plan meets the NGSS in the areas indicated below if used as recommended. It is not however limited to these standards and can be modified as the instructor sees fit to include more or adjusted to meet the needs of other grade levels.

**Next Generation Science Standards (NGSS)**

*Structure, function, & Information Processing*

Performance Expectations

Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

**Dimension #1 Scientific & Engineering Practices (SEP)**

*Asking Questions*

*Constructing Explanations*

**Dimension #2 Crosscutting Concepts (CC**)

*Structure & Function*

*Energy & Matter*

**Dimension #3 Disciplinary Core Ideas (DCI)**

Life Sciences

2. All organisms need energy and matter to live and grow. As a basis for understanding this concept: a. Students know plants are the primary source of matter and energy entering most food chains. b. Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem. c. Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.

3.Living organisms depend on one another and on their environment for survival. As a basis for understanding this concept: a. Students know ecosystems can be characterized by their living and nonliving components. b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all. c. Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter~~.~~

**Questions to Review**

*What are gibbons?*

*Are they monkeys or apes? Why?*

*Where do gibbons live?*

*What is the rainforest?*

*Where can we find rainforest?*

*Why are gibbons an important part of the rainforest?*

Describe gibbon’s traits.

*Do you remember why they sing?*

*Why do they have large canines?*

*Why do they have fur?*

*Why do you think gibbon fingers are slightly bent like a hook?*

*What is the benefit of walking upright?*

*Why do you think gibbon’s arms are longer than their legs?*

*What are some of the benefits of toes that grasp?*

*Why do you think they fight with or become territorial with their eldest offspring?*

*Why are babies the same color as their mothers?*

*What is a benefit of having ball and socket joints?*

*Why do gibbons change colors?*

**Rainforest Network**

Lets grab a sheet of (reused) paper. (Optional you can also just have them watch)

Help me name some of the plants and animals that live in the forest. I will stick a photo (foam cutout) on the board and write out the names. Let’s color-code the names to keep it easier for later.

*What is a producer? Write or circle in blue*

*What are some producers that live in the rainforest?*

*What is an herbivore? Write or circle in green*

*What are some herbivores that live in the rainforest?*

*What is a carnivore? Write or circle in red*

*What are some carnivores that live in the rainforest?*

*What is an omnivore? Write or circle in purple*

*What are some omnivores that live in the rainforest?*

*What is a decomposer? Write or circle in brown*

*What are some decomposers that live in the rainforest?*

Now lets make some connections. Were going to draw arrows to what each animal needs.

*What do producers need to survive?*

*What do herbivores need to survive?*

*What do carnivores need to survive?*

*What do omnivores need to survive?*

*What do decomposers need to survive?*

*What are humans?*

*What do humans need to survive?*

*What would happen if there were no producers?*

*What would happen if there were no herbivores?*

*What would happen if there were no carnivores?*

*What would happen if there were no omnivores?*

*What would happen if there were no decomposers?*

*What would happen if there were no gibbons?*

*What would happen if there were no rainforest?*

Recall

There are 19 different species of gibbons

There are only 25 Hainan gibbon left as of May 2015.

*What are potential reasons for their decline?*

*Do you think this is a healthy population number? Why not?*

*What do you think can be done?*

*What do you think this means for the rest of the gibbon species?*

*What do you think this means for other animals living in the rainforest?*

Present on the board current animals population numbers and endangered status.

*How does this make you feel?*

*Do you think this affects humans?*

*What can you do to make a difference?*

*What do you think happens if we do nothing?*