

Culminating Activity: Science Unit 1 Life Systems Project

In this science unit, we have learned about the interactions between different parts of an ecosystem. All **abiotic** and **biotic** factors in an environment influence each other, and if one part is changed or removed, the rest of the ecosystem must adapt in order to survive. Examples of an interaction include:

- **Climate change** causes melting of the polar ice caps, which affect how polar bears can hunt and move in their environment
- **Deforestation** in tropical rain forests eliminates some tree species, impacting the animals and organisms that rely on those trees for food and shelter
- Humans introducing beavers in Chile as an **invasive species** creates a domino effect as beavers started destroying river ecosystems through erosion

Your Task:

Choose an ecosystem that has been impacted by human interaction. Create a model ecosystem (done on the computer or by hand) showing the impact humans have had on that ecosystem (i.e. what it looked like before and what it looks like after the human interaction/ change). Make sure to include abiotic and biotic elements and the interactions between them, including the roles of producers, consumers and decomposers.

You will hand in:

A model ecosystem: This can be a diorama, an illustration that you have drawn, a power point slideshow of pictures, or any other creative idea you may have!

Your model ecosystem must show:

- ✓ what the ecosystem looks like before and after the interaction
- ✓ abiotic and biotic factors **that are labeled**
- ✓ producers, consumers, decomposers **that are labeled**
- ✓ an example food chain **that is labeled**

A 1–2 page description of your model ecosystem that explains:

- ✓ the human interaction that caused the change (e.g. forest fire, logging, etc.)
- ✓ the costs and/or benefits of the interaction
- ✓ the ways in which the parts of the ecosystem (abiotic and biotic) are connected, and how a change in one factor changes the others
- ✓ a solution for protecting or preserving the ecosystem

You will also find resources and extra support on our class website. Carefully, into your internet browser (**do not google, it will not show up**) type:

mskukurudzasclass.weebly.com

Check-in (online or handed in) due: Monday, November 4, 2013.

Assignment due: Monday, November 11, 2013.

Name: _____

October 30, 2013.

Culminating Task: Science Unit One Life Systems Project

CHECK IN SLIP - DUE NOVEMBER 4, 2013.

I have read the full Culminating Assignment handout with Task description, rubric, and exemplar.

I am showing the ecosystem

before and after the human interaction/ activity of

_____.

I will be showing my ecosystem through:

- A diorama
- Powerpoint (NOTE: You will **not** be presenting in class, you will hand in your slides with pictures and text on a USB).
- An illustration
- A bristle board presentation
- Other: _____

This check-in can also be handed in electronically through our class website:

mskukurudzasclass.weebly.com