**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Engage**

In Task 2, you learned about the different animal behaviors and plant structures that allow organisms to survive and reproduce. But remember that global temperatures are rising! What happens if an organism’s environment changes in a way that affects their behaviors and structures? In this task, you will investigate how increasing temperatures are impacting organisms around the world.



Many of you have heard about global warming in the news or in prior science classes. In partners, brainstorm a list of plants and animals you’ve heard are being affected by rising global temperatures. For any plants or animals that you know more about, add a description of how they are being affected.

**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Explore**

**Cause and Effect:** In the last task, you saw examples of specific plant structures or animal behaviors that help an organism survive and reproduce. As global temperatures rise, we are seeing these plant structures and animal behaviors changing in response. How do you think this affects organisms?

As a group, for your Culminating Project you will be presenting a poster at a Science Conference that focuses on the question: How is global warming affecting organisms around the world? Research the organism you chose for the Culminating Project to figure out how it is being impacted by rising global temperatures. Use the space below to take notes based on your research:

**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Explain**

**Cause and Effect**: Now that you’ve done the research, it’s time to create your poster! As a group, create a poster that describes your organism and the impact of rising global temperatures. Your poster should include:

* A description of your organism
* A description of the plant structure or animal behavior that helps it survive and/or reproduce
* An explanation for how it is affected by global warming
* Visuals and headers to get your audience interested!

Prepare to present your poster to your classmates!

**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Elaborate**

## We know that organisms around the world are being affected by global warming, but what can we do about it? Brainstorm some potential solutions to monitor and minimize this impact on your chosen organism. To do your brainstorm, use the “Design Thinking Post-It” Method:

1. Individually, use post-its to write down any and all ideas you have for solutions. These do not have to be well thought-out! The goal is to get as many ideas on the poster as possible.
2. As you write down ideas, post them as post-its on a blank poster paper.
3. Make sure EVERYONE’S ideas and post-its are shared!
4. As a group, cluster similar post-it ideas into groups.
5. Discuss and record your top ideas in the space below:

**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Evaluate: Connecting to the Culminating Project**

You have been asked to create an advocacy video that describes the human impact on an organism and gives a potential solution. In this task, you learned about how humans are impacting your chosen organism through global warming and are well on your way to coming up with a solution!

* Summarize the ideas from your poster here.
  + Describe the feedback you received from peers and how you plan to revise it based on that feedback.
* Return to your criteria and constraints that you identified after Task 1. Based on what you have learned about your organism so far, how can you revise them or add to them?

This should be individually in your Project Organizer.

**Unit Essential Question:** *How do humans impact organisms around the world and what can we do about it?*

**Reflection**

Individually reflect on Task 3, using the questions provided:

1. At the beginning of this task, you were asked to brainstorm a list of plants and animals affected by rising global temperatures. In what ways is your organism being affected similarly or differently by global warming?
2. In this task, we focused on the crosscutting concept of:

* **Cause and Effect**: Phenomena may have more than one cause, and sometimes relationships can only be described using probability.

Where do you see examples of **Cause and Effect** in this task?

1. Now that you have learned more about the impacts of global warming on organisms, what questions do you still have?