



Name \_\_\_\_\_

Class \_\_\_\_\_

Research Group: \_\_\_\_\_

Research Team: \_\_\_\_\_

## Arctic Climate Connections Activity 2 - Do you really want to visit the Arctic?

### WARM-UP ACTIVITY:

After reading the *State of the Climate* report, write down 3 questions about the Arctic that you might like to know the answers to. For example, do you want to know about the environment, the landscape, the people, or the weather? Try to phrase your questions so they are specific.

1.

2.

3.

### Part A – Research Groups

Each Research Group will have their own set of questions. Your teacher will provide separate worksheets for that part of this activity.

### Part B – Research Teams

What is your Research Team studying?

Conditions needed to engage in the research mission:



Considering both your research mission and the weather conditions in Eureka, describe the best time of year to visit and why.

**Air temperature:**

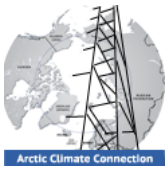
**Wind speed:**

**Snow depth:**

**Incoming radiation:**

Step 2 – After every team member has presented their data summary, the whole group should decide on a time of year that makes the most sense to plan for an Arctic visit. This answer should take into consideration both the research mission of the trip and the meteorological conditions necessary to engage in the research mission.

**Best overall time of year to visit Eureka for your Research Team and why:**



How does the Eureka weather compare to the weather in your hometown?

Would you, personally, want to take a trip to the Arctic? Why or why not? What time of year would you want to go? Explain why.

### Part C – Individual Reflection

Aside from the usual calendar-based definition, how would you define “winter”? Scientists need to come up with measurable ways of defining what they are looking for (otherwise, how do you know if you’ve found it?). So, create a concrete definition for “winter” that is measurable using the all of the datasets that you have seen in this activity.



Using your definition for winter and the available data for 2010, how long was winter in this location in the Arctic?

Using the same definition of winter, how long is winter in your hometown?