

Climate Tweets – Examining Global Climate Change

GRADE LEVEL: K - 2

MATERIALS: Globe or map of the world, book – “On the Same Day in March” written by Marilyn Singer, illustrated by Frane Lessac, list of climate change tweets, internet access, iPad or computer

OBJECTIVE: Develop understanding of the difference between climate and weather.

SKILLS: Critical thinking

VOCABULARY: (global) climate change, global warming

OVERVIEW (for teachers): This lesson is going to explore weather, and the difference between weather and climate. First, students will consider the weather, then build into the understanding that the weather we experience during our four seasons defines our climate. Last, the students will think about: What would happen if this were to change? What if the Earth got much warmer than it is today? What do you think it would look like?

PART I: Weather

INTRODUCTION (for students): When you think of October, what kind of weather do you think of? Is it warm? Is it cold? Is it rainy? Do you get snow? How about in March? It is usually the end of winter for us. What is it like outside? Do you get to go outside and play much? Do we still get snow? Is it sloshy, wet, and muddy from melting snow? We are going to read the book, “On the Same Day in March” by Marilyn Singer, and illustrated by Frane Lessac. While we are reading the book, think about how the weather we get in March is different from what the people in the book are experiencing.

DIRECTIONS (for teachers): Gather the students into a circle or at a reading carpet to read the book. After reading the book, discuss the different types of weather the people were experiencing. Use the globe or a map to point to the different places in the world mentioned in the story so the students can see how where you live can affect the kind of weather you get in March. Show the students that in the northern hemisphere, we are having springtime, but in the southern hemisphere, it is fall.

PART II: Climate

INTRODUCTION (for students): Climate is the pattern of weather we expect to see every year. Climate is how we know we need snow pants and snow boots for winter if we live in North Dakota, but not if we live in Florida. Climate is the reason there are cacti in the deserts, and alligators in humid swamps. Think about the plants and animals you see that live in North Dakota. Where else do you think the same kinds of plants and animals live? Where would the plants and animals be very different?

DIRECTIONS (for teachers): This can be completed as a class, or in small groups. The National Oceanographic and Atmospheric Administration (NOAA) interactive map allows students to click on different climates and read about what is found there. This is the link:

http://oceanservice.noaa.gov/education/pd/oceans_weather_climate/media/climate_zones.swf

A text box will appear to describe the climate, and give pictures of the types of vegetation seen there. The students should compare the climates for North Dakota and for at least 3 other parts of the world.

PART III: Journaling

INTRODUCTION (for students): Now that you know a little about weather and climate, think about what it would be like if they were different. What might happen if the climate were to change? Scientists have been studying climates for a long time. They think they have seen changes in the climates around the world that show the Earth is getting warmer everywhere. People around the world are concerned about how the world would change if the Earth gets too warm. They post comments on the internet to say what they are feeling. How do you think North Dakota might be different if our climate got warmer? What would our summer or winter be like? What plants or animals would live here?

DIRECTIONS (for teachers): Read a few of the climate change tweets to the students (see Climate Tweets List Access instructions). The students will draw/journal their version of what they think climate change means. Help students write a short message about their drawing to be posted below their artwork. If your school has computer or iPad resources, have your students record a short message about their drawing that can be viewed in Animoto or 30Hands. Post their drawings in the hall at the school to be viewed by other students and parents.

ADDITIONAL RESOURCES:

Earth Day Network: Climate Education Week. This site contains links to other lesson plans at multiple grade levels to help understand how a changing climate can have far-reaching effects. <http://www.earthday.org/climateeducationweek/itextbook-apple-store-release-on-april-18th/>