

Unit Title: How does Climate Change Change US?

Grade Level: *High School*

Subject Area: Math, Science, CTE

Duration/Length/Number of class periods: 7 class periods (50 minutes)

Description:

In this unit, students explore the interconnectedness of climate systems and impacts of climate change. Students explore how climate change impacts themselves and people in multiple parts of the world and how some areas have resources to mitigate the impacts and others do not.

Established Goals (National, State, Local):

- MN 9.4.1 Display and analyze data; use various measures associated with data to draw conclusions, identify trends and describe relationships.
- MN 9.4.2 Explain the uses of data and statistical thinking to draw inferences, make predictions and justify conclusions.
- MN 9E.2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
- MN 9E.4.2.1 Students will be able to read and interpret multiple sources to obtain information, evaluate the merit and validity of claims and design solutions, and communicate information, ideas, and evidence in a variety of formats.

What Enduring Understandings are desired?

How does climate change disproportionately impact people in the US and world?

What Essential Questions will be considered?

How does climate change impact people's lives?

Compare how climate change impacts me, people in the US, people in the world

Students will know / be able to:

- explain how the components (at least 3) of climate systems are connected
- explain visually how the arctic climate changes impact other parts of the world
- connect a climate impact to themselves, another part of the US, and another part of the world
- analyze the disproportionality of climate impact in different parts of the world
- share learning with classmates via shared google slide show

Description	Formative	Summative	Introductory Activity	Learning Activity	Student Technology Used	Teacher Technology Used	ISTE Standards
Units must include at least one of each formative, summative, introductory activity and learning activity. Check the appropriate box; one per row.							
1. Climate Web Activity - students model the interconnectedness of the climate system - lesson plan link			X			google suite	
2. Climate Systems Worksheet - apply concepts from web activity and previous units - link	X				google site, notes	google suite	
3. Jigsaw - How different communities of living things are impacted by climate change (reading and share out to group with recorded or live skit) - lesson plan link	X			X	video app	google suite	1.d
4. Jigsaw - How arctic changes impact the rest of the world (students create a visual representation of an arctic feedback loop) - lesson plan link	X			X	google slides/piccollage/other	google suite	2.a, 3.b, 3.c, 5, 6
5. Gallery walk or video exploration - Regional impacts of climate change (students use a jamboard to connect regional factors with climate change) - link	X			X	jamboard, website videos	google suite	2.c, 5
6. Self-Connection - How is climate change impacting your life? (mentor text - write your own climate story)	X			X		google suite	
7. Personal Stories - Find another place in US where people are impacted in the same way (video exploration of personal youth stories) - website	X			X	ocof website videos	google suite	4.c, 4.d
8. Virtual Collaboration - impact of climate change and how it affects people in different parts of the world (google slides collaborative learning activity) - link		X			google slides	google suite	2.a, 3.b, 5, 6

Materials, tools and resources:

1. climate system "name" tags, string
2. resources from previous units, worksheet (printed and electronic)
3. readings (printed, electronic, recorded audio)
4. readings (printed, electronics, recorded audio), google slides or piccollage
5. jamboard or video link google doc assignment
6. paper, google doc journal assignment
7. google doc video assignment
8. shared google slides presentation

Unit Plan Author (name, school and optional email address or hyperlink to teacher's web page): **Jennifer George, Fairview Alternative HS, jennifer.george@apps.isd623.org**

Additional credit given to: Our Future Our Climate, NEED, Climate Generation