

Lesson Description: Lesson 8 Climate Change and You

This lesson will look at how climate change is affecting our weather and its impact on human activities.

Outcomes



Resources



Procedure



Assessments



Grade: 5

Subject: Science

Unit: Predicting the Weather

Driving Questions: *How do we predict the Weather?*



Curriculum Outcomes:

Science:

Environmental Issues

105-1 - identify examples of weather phenomena that are currently being studied.

106-4 - describe how studies of the depletion of the ozone layer, global warming, and the increase in acid rain have led to new innovations and stricter regulations on emissions from cars, factories, and other polluting technologies

Expected Time: minutes



Resources:

- Video: The Inconvenient Truth (Al Gore's video on Climate Change)
- [Socrative Quiz](#) on Global Warming: Share Quiz (SOC #: **16805816**)
- Check out NASA's Climate Change site: [Climate Change](#)
- [PowerPoint on Climate Change](#).
- [Climate Change Headlines Collage](#)



Lesson Procedure

**21st century
skills**

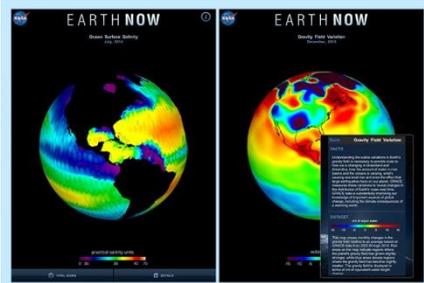
<p><u>Climate Change and You Introduction</u> Lesson 8: Entry Event (15 Minutes)</p> <p>Teacher begins the lesson by asking the students what they learned from the reading the night before. The length of this discussion will depend on student responses and engagement in the discussion. Teacher could ask questions to stimulate the discussion like: What is climate change? (How is this different than global warming?) What are the dangers of climate change? Is this all bad news for humans? Aside from what you learned from the reading is there anything else you have heard in the news about climate change that you might like to share?</p> <p>After the discussion have the students log onto the Socrative Quiz and complete: Socrative Quiz on Global Warming: Share Quiz (SOC #: 16805816)</p>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> find, validate <input type="checkbox"/> remember, understand <input type="checkbox"/> collaborate, communicate
<p><u>Climate Change NASA Video</u> Lesson 8: Individual student work (You Do) (10 Minutes)</p> <p>How does climate change effect humans? : Have students access NASA Website and watch the climate video: How does climate change effect us?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> find, validate <input type="checkbox"/> remember, understand
<p><u>Climate Change NASA Video</u> Lesson 8: Group work (We Do) (60 Minutes)</p> <p>After the students have watched the NASA video, they will come together as a class and we will view the Climate Change PowerPoint. (There are presenter notes attached to the PowerPoint which contain questions for the students)</p> <p>When we reach slide 13 in the PowerPoint the students will divide into groups of two in order to produce a collage of climate change images from the Internet like the headlines one in the PowerPoint. This is also available on the website as well as a link. Students are to go online and create a Climate Change PicCollage of images they find online and can be displayed on the class Apple TV.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> collaborate, communicate <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> create, publish <input type="checkbox"/> citizenship
<p><u>Class share (We Share):</u> (10 minutes)</p> <p>Students will present their collages through the Apple TV and should be able evaluate and leverage as to why they selected the pictures they did and how they relate to global warming when presenting their PicCollage.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> collaborate, communicate <input type="checkbox"/> evaluate, leverage <input type="checkbox"/> citizenship

Lesson Wrap Up:

Closing Question:

In the next lesson we will begin to look at our final weather project: Please finish review of technology screencasts in preparation for this. Also, have students install the following two Apps from NASA: Earth Now and Images of Change. Both Apps are produced by NASA and offer great explorations and extensions for student learning.

Earth Now



It's free, it's dazzling and it puts Earth in the palm of your hands. NASA's "Earth Now" app displays real-time global satellite data of your planet's vital signs. Great for students, teachers and anyone interested in Earth science, this 3D app can be your go-to source for carbon dioxide conditions, gravity anomalies, ozone levels over Antarctica and more. Download it to your [Apple](#) or [Android](#) device to keep your eye on the Earth.

Images of Change



Images of change app Human activities, a changing climate and natural disasters are rapidly altering the face of our planet. Both NASA satellites and ground photographers have captured these changes in the form of eye-opening before-and-after images of phenomena ranging from glacial retreat to urbanization. Each image can be viewed side-by-side or with an interactive slider and in context on a world map. Download it for free to your iPhone and iPad to learn about your changing world.

Differentiation/Modification/Enrichment:

For enrichment students may want to read the selection: [Climate Change](#) by Reading A to Z.

*For differentiation during the [Socratic Quiz](#) on Global Warming: Share Quiz (SOC #: **16805816**) read the questions orally to students who may have difficulty understanding what is being asked.*



Assessment:

*Observation and participation in small group and class discussions.
Student performance on Socratic Quiz and Climate PicCollage*

Teacher Reflection:

Why do we study the past?

- to understand how people lived
- why did they live this way?
- Appreciate their achievements and accomplishments
- How has history changed how we live.