

# Exploring Climate Change with Google Earth

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## Overview

This lesson relies on Google Earth for students to explore the diverse impact of Climate Change on a Global Scale and investigating the local impacts. After viewing a Google Tour students will then create their own localized Google Earth Tour to map and investigate Climate Change implications for their local environment. After creating their own tour they will share their tour with the class.

**Key words:** Climate Change, Google Earth, Evaluation, Global to Local, Montana Climate Change

## Instructions

1) The instructor will begin this lesson by showing students a google tour that explores any of the myriad of aspects of Climate Change. Google Earth has a well-curated set of tours to choose from at this [website](#).

2) Students will be divided into groups of 2-4, depending on class size, to create their own google tour that investigates local impacts of climate change in Montana. You can assign groups different points for investigation or allow students to search based upon their interest, hobbies and areas of fluency and background information.

3) Students should build upon their google search skills and start with preliminary research concerning climate change in Montana and its impacts. The easy places of investigation are pine-bark beetles, invasive species, melting glaciers and changes to fish and game habitat. (See resources for a list of places to start investigation.) Students will have to use this research and build yet another annotated bibliography that they can then cite and link to the articles in their tours.

4) Each group's tour should have 7-12 stops that demonstrate the local impact of Climate Change. The tour should be diverse and include embedded images and outside links to aid in understanding.

5) After creating their tour students should share their tour with the class. This can be done by presentation or an online sharing procedure can be established.

## Materials

-Mobile devices or CPUS -Access to GAFE -Digital projector for sharing of tours

## Resources

For the Google Earth Climate Change Tours see [here](#).

To get started on Climate Change in Montana see [here](#) [here](#) and [here](#).

USGS has a site dedicated to Glacier National Park [here](#).

### **Rubric**

**A-** The Google tour and accompanying bibliography demonstrate a thoughtful analysis of impacts in Montana and present the information in a creative and sophisticated manner. The group went well above the minimum expectations of the assignment to create a body of work that is truly inspiring.

**B-** The group created a tour that meets the minimum requirements in a thorough and deliberate way; but it is expected and lacks creativity. Some stops on the tour seem forced and lack thoughtful analysis.

**C-** The group clearly rushed to meet the minimum expectations of the assignment and in the process overlooked key aspects of the assignment. The tour is incomplete or lacks a diversity of analysis and discussion of impacts of Climate Change in Montana.

**D-** The group failed to complete their tour but started to make an effort toward the required assignment.

**F-** Nothing submitted.

### **Standards**

[Standards for this unit will be aligned with the Common Core State Standards](#)

CCSS.ELA-Literacy.WHST.11-12.1 & 12.7 & 12.8 & 12.9 CCSS.ELA-Literacy.RH.11-12.4

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