

# Global Warming Basics & Local Climate Change Impacts

Ashland Middle School Presentations

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Organized by Kathy Nguyen, Manzanita Science Teacher, Ashland Middle School  
Plan (30 minutes) “Slides” refer to power point

## I. Intro

Slide 1: Title: Global Warming Basics & Local Climate Change Impacts

Slide 2: Global Temperature Increases (1/1 minute)

## II. Basics of global warming (7/8 minutes)

Slide 3/4: Basics of Global Warming

- Incoming visible radiation
- Hits the surface and turns into infra-red/heat radiation
- Passes out

Slide 5/6: Increasing greenhouse gas concentration

- Same as previous slides, but now more heat is retained so less passes out into space

## III. Identify the main greenhouse gasses that are responsible for the problem and their sources (3/11 minutes)

Slide 7/8: Identify Main Greenhouse gases: CO<sub>2</sub>, Methane, Nitrous Oxide

Slide 9: Sources of Greenhouse gases: Coal, Oil, Natural Gas

## IV. Local Impacts

- Groups each get one of the 3 local trends/projections (temperature, precipitation, snow pack) OR 2 consequences (soil moisture and wildfire) with graph or information about it. They prepare to share with the class (5/16 minutes)

Slides 10 - 17

- Power point has the information that the group received and the graph/information is shown while a person from the group explains their information (7/23 minutes)

Summary (2/25 minutes)

Slide 18

Questions for Part IV – Write down in their notebook:

1. Temperature: What are the temperature trends?
2. Precipitation: What are the precipitation trends?
3. Snow pack: What is the snow pack trend?
4. Soil moisture: What are the consequences of the trends in soil moisture?
5. Wildfire: What are the trends in western wildfires?