

The Words of Climate Change

Duration:

1/2 class to set-up
Ongoing over the
climate change unit

Objectives:

Students will:

- Interview each other about what they know about climate change
- Read an article on climate change
- Create a journal and vocabulary list
- Re-interview to evaluate what has been learned

Vocabulary:

Abrupt Climate Disruption

Refers to human induced, sudden changes to climate rather than natural changes in climate observed over long periods of time

Climate

The average weather conditions over a long period of time in a certain place

Climate Variability

The natural changes that occur in the earth's climate due to natural phenomena that influence atmospheric gases and global temperatures

British Columbia PLO's:

Science 6, 7, 8
Social Studies 6, 7, 8

Background:

This activity is designed to introduce students to the topic of climate change. It should be used as the first activity of a climate change unit. Students will create a journal that can be used throughout the unit for responses and notes. They will also start a vocabulary list that can be added to as they complete other activities in the unit.

Differences in meaning can cause confusion in any topic. Climate change, with its many words and terminologies, is no exception. The international Framework Convention on Climate Change treaty used the following definition, “a change in climate which is attributed directly or indirectly to human activities that alters the composition of the global atmosphere and which is in addition to natural climate variability of comparable time periods.” The United Nation’s International Panel on Climate Change’s definition is, “any change in climate over time whether due to natural variability or as a result of human activity.”

Understanding the terminology of a subject is a necessary step towards better understanding it.

This activity will help students begin to build their base knowledge on climate change in order to learn more about specific topics within the subject area.

Over the last 20 twenty years there has been a growing field of science focused on studying how the earth’s climate is changing due to human impacts. Many terms have been used including climate change and global warming, but what do these terms actually mean?

Materials:

- *Ocean News* article class set *The History of Climate Change*
- Interview questions for students or on an overhead
- Blank book or paper for climate change journal
- Pens and pencils
- Dictionaries

Procedure:

1. Write the term “climate change” on the board. Tell the students that the next unit will focus on climate change and how it impacts our planet.
2. Have the students pair up with someone in the class where they will interview each other about climate change. They can use the prepared interview questions or can create their own questions. The prepared questions can be photocopied or put on an overhead for all to see.

Climate Change

Common term referring to the abrupt change in climate attributable to human activities

Global Warming

The common term used to refer to abrupt climate change

Global Cooling

Cooling of earth's climate over time, usually leading to periods of glaciation and ice ages

Global Dimming

The event of the earth becoming dimmer as a result of less sunlight reaching the earth's surface due to increased cloud cover, particularly due to air pollution

Greenhouse gases

Gases in the atmosphere that trap solar energy, heating the earth like a greenhouse. Carbon dioxide and methane are both examples of greenhouse gases

3. After 5 to 10 minutes have the students move around the room and interview someone else using the same questions.
4. Once the two interviews are completed, get the students to write down their own answers in a new section of their book titled "Climate Change" that they will add to and use throughout the unit.
5. As a class or individually have the students read the *Ocean News* article *The History of Climate Change*.
6. On the board create a list of new or unfamiliar words in the article.
7. At the back of their book (or at the front where they can leave some space) have them start a vocabulary list where they can add words and note their definitions. Have them add the words on the front board to their list. Greenhouse gases should be one of the words listed.
8. Give the students time to define the words they do not know using the dictionaries in the classroom (the words they cannot find can be assigned for homework).
9. Have the students pair up with one of the people they interviewed earlier in the class and re-ask the same questions regarding abrupt climate change. After the interviews ask them to share what they have learned with the rest of the class.

Long-term

10. Have the students add to their vocabulary lists each day.
11. Later on in the climate change unit, students can re-interview each other and

compare their notes to their older notes in their notebook to see what they have learned. Again, ask them to share what they have learned throughout the unit.

12. Print out the blank map of the earth. Put one up in the classroom and have the students paste a copy into their climate change notebooks. As you read articles and learn about climate change have the students add impacts on their maps in the locations they are occurring. At the end of the unit have the class review their maps to see how much they have learned. You can also compare it to the world map used in different articles and lesson plans throughout this resource guide.

Discussion:

- How will climate change impact your life and community?
- How do greenhouse gases contribute to climate change?
- How does keeping a vocabulary list help with learning?

Extension and Resources:

- The vocabulary list the students create can be used for all of the upcoming climate change activities. They should be encouraged to add all unfamiliar words. Try to give them time every few days to have access to a dictionary in order to define the words.
- This is a good website with a sea level rising animation
www.net.org/globalwarming/sea_level/