

Top Ten Things You Should Know

Duration:

1 class

Objectives:

Students will:

- Discuss important aspects of climate change and global warming
- Choose one important climate change topic to further investigate
- Present their findings to the class

British Columbia PLO's:

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

Background:

In this activity students will review the major topics associated with abrupt climate change. Each student will then choose one of the concepts that they feel is important to understand, research the topic and then become an expert and teach others in the class on this topic.

Climate change and global warming can be overwhelming topics to discuss. Scientists have been studying how climate impacts organisms and ecosystems for decades, but are only recently beginning to come to a consensus about what it all means. With all the information that is out there, it can be difficult to determine what we should really know about climate change.

One-way to learn more about climate change is tackle it piece by piece. This activity encourages students to understand single parts of the climate change story. Later on, students will learn the other important pieces from their classmates.

This activity covers a wide range of topics related to climate change and the impacts it will have on the planet. Starting this activity near

the beginning of a climate change unit, and having it due near the end, will help focus the students in the discussions and the readings throughout the unit.

Materials:

- *Ocean News* class set of articles
- Access to:
 - current information on climate change
 - library
 - internet
 - newspapers and magazines

Procedure:

1. Have the students write a short journal entry about what they know regarding climate change. This can include: what they have heard about climate change from the media, their parents or friends; any problems or proposed solutions to the dilemma; what students do in order to conserve and reduce, etc. This is a free-writing activity, as you want the students to write down as much information as they can. Have the students put this away somewhere where it will not be lost (keeping it as part of a unit journal is a good way of organizing ideas and assignments).
2. As a class, or individually, read the *Ocean News* article *Top ten things you need to know about climate change*.

3. Have the students create a list of words or phrases from the article they feel are important, do not understand, or would like to have clarified. Review several of these on the board and if the students are keeping vocabulary lists have them add them to their journals.
4. Assign or allow them to choose one of the points from the *Ocean News Top ten things* article that they would like to research and investigate. Each of the points covers a large topic and can be explored further. The students will then work on preparing a presentation on their particular point.
5. Determine and share with the students how they will be evaluated and marked on their presentations.
6. Review with the students the differences between research sources. Which are credible and which are not? Decide whether online encyclopedias, such as Wikipedia, are valid references.
7. Have the students research their topic during assigned class time, for homework over the next week, or throughout the duration of the unit. They can use the other articles in the *Ocean News* set.
8. On presentation day have the students present their findings. This can be done with formal presentations, or with a poster session where students walk around and read what others have done.
9. During this presentation day have the students evaluate the work of 3 to 4 other students. You can assign who will be examining whose work ahead of time. Using a rubric or marking sheet you have created, have the students create constructive criticism with positive points and things to improve upon. Points of consideration should be creativity, neatness, reliability of sources, variety of sources used, ease of reading, and topic comprehension.
10. After the presentations ask the students to read their original entry written on the

first day about what they know about climate change. Have them do a second journal entry reflecting on what they have learned over the course of the last few days.

11. Display the student works in an area for the entire school to see, encouraging your students to help educate others through sharing their posters.

Discussion:

- Why is it important to understand climate change?
- Why is sharing knowledge important?
- If you could share one thing that you learned during this activity what would it be?
- How will you continue to help others understand climate change and the impacts it has on the natural environment?

Extension and Resources:

- The summary of the IPCC report of 2007 is a comprehensive report that discusses temperature and sea level that could be used for enhanced readers
<http://72.14.253.104/search?q=cache:8IBSINwz0-kJ:www.ipcc.ch/pub/spm22-01.pdf+ipcc+report+summary&hl=en&ct=clnk&cd=1&gl=ca&client=firefox-a>
- The David Suzuki Foundation is a good source for a variety of topics
www.davidsuzuki.org/Climate_Change/
- Environment Canada website
www.ec.gc.ca/default.asp?lang=En&n=6EE576BE-1
- Google is also an effective internet search tool that can be used, but isn't monitored.
- School librarians are a good resource to finding current material that is easily accessible from the library.

Risk management:

Most school computers are equipped with Internet sensor devices, but remind students to stay on task and, as a precaution, be sure to monitor their web surfing activities.