

Everything is Connected



Introduction:

“Everything is connected to everything else” is often called the First Law of Ecology. This activity encourages students to consider the connections between aspects of our natural environment and human society. With the population having reached 7 billion in late 2011 and projected to grow to 9-10 billion by 2050, one cannot ignore the far-reaching impact of our numbers on virtually every aspect of life on Earth.

Materials:

Butcher paper/flip chart paper
Markers

Procedure:

1. Divide students into groups of three or four and distribute butcher paper and markers to each group. Have each group write the words “7 Billion People and Growing” in the middle of the paper. Tell students that you want them to think of what might be the environmental, economic or social impacts of more than 7 billion people living on the planet. You may want to provide an example, such as, “more people”... might mean “more cars on the road” or “more houses.” Next to “7 Billion People and Growing,” draw an arrow and add one of these concepts. Be sure to tell students that there are no right or wrong answers, but you may ask them to explain their proposed connections. Also, let them know that the cause and effect relationship can be positive, negative or neutral.
2. Working within their groups, let the students add to this word web. They may add on to the central concept, “7 Billion People and Growing,” or add on to what someone else contributed. For each concept that a student adds, he/she should draw arrows to any of the other concepts that form a cause and effect relationship. The object is for each group to create a large and interconnected web.
3. If this is as far as you’re planning to go with the activity:
 - Have each group hang their concept map on the wall. Let the students walk around the room and look at each other’s maps. Go over discussion questions.

Concept:

In nature, everything is connected to everything else. Human population growth is a factor that can have far-reaching effects on the environment and society.

Objectives:

Students will be able to:

- Identify possible environmental, social, political, and economic effects of a growing world population.
- Create a concept map within a cooperative learning group or as a class to illustrate these cause and effect relationships.
- Research news outlets to find real world examples of population impacts.

Subjects:

Economics, Health, Science, Social Studies

Skills:

Drawing connections, explaining cause and effect relationships, working in cooperative groups, concept mapping

Method:

Students identify ways that many factors in human society and the natural environment are interdependent by creating a concept map in cooperative learning groups.



If you'd like your students to do further research on the topic:

- Do not have your students share their webs at this point and follow the instructions below to "Take it further."

Take it further:

1. Challenge each student to find two news articles that make the connection between population and other items on their web. This may be done in class or as a homework assignment. Request that one article be on a global scale and one on a local scale. For each article, have the student write a short summary of the article, 4-5 sentences, on an index card.
2. During your next meeting period, have the students return to their small groups and bring out their concept maps. Have each student tape their index card summaries onto the concept map where their articles fit into the web. This may mean that students need to expand their web to include more items – that's okay!

Discussion Questions:

1. Do you agree with all the connections that have been made?
2. Were there any connections that you saw on all of the concept maps? Did you make any connections on your map that you didn't see on others?
3. Can you think of any connections that would link the maps together? Would it be possible to combine each group's concept map into one large web?



Sample Web

