

## Human Population: Everything is Connected Concept Map

### **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.

**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.

### **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.

### **Procedures:**

- Get into small groups of students- each student will need a **different colored marker**. Each member of group will be responsible for contributing to the chart with their specific colored marker.
- Each group of students will receive a large piece of chart paper. Have each group write the words *“7 Billion People and Growing”* in the middle of the paper.
- Think of what might be the **environmental, economic or social impacts** of more than 7 billion people living on the planet. Discuss as a group.
- Next to “7 Billion People and Growing,” draw an arrow and add one of these concepts. Use arrows and lines to connect all related concepts on the map.

Don't forget to add linking terms to show the connections. Students can add to or expand on another student's idea.

- Students should know that the cause and effect relationship can be positive, negative or neutral.
- After discussing, student will hang and share their concept maps with the class. Students will walk around to see other groups.

### **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?
4. Name the top 3 issues with human population dynamics.

### **See Example Below:**

