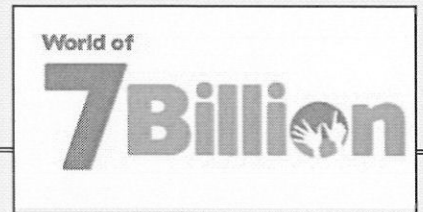


Population Circle



Introduction:

Students may know that world population is currently about seven billion, but it is instructive to put that number in the context of history. By simulating population growth over the last 500 years, students discover that most of our growth occurred in the past 200 years.

Materials:

Counting Cards
Chalk or yarn

Procedure:

1. Cut out the Population Circle counting cards.
2. Using chalk or yarn, place a 10-foot diameter circle on the floor, and ask the class to gather around it. Explain to the class that the circle represents the Earth, and that you will be looking at how the population of the Earth changed from 1510 to 2010, a 500 year span.
3. Distribute the 28 counting cards. Each card represents 250 million people. If you have fewer than 28 students, you may use chairs or another item to represent additional people.
4. Ask the two students with the number “0” on their cards to step into the circle. Explain that these students represent everybody who lived on the Earth 500 years ago, when our population was about 500 million people. Now, almost seven billion people live on the Earth.
5. Tell the class, “We will be counting from 1 to 100 to find out how our population grew. As we count, we will fast forward through the past 500 years. With every number we say, we will jump ahead five years. When we reach 100, all 500 years will have passed, and we will be at the present. Listen carefully, because when we get to the number on your card, you will need to step into the circle.
6. Ask the students to forecast the number when they think the next person will enter the circle.
7. As a group, start counting at a comfortable pace. Stop when you reach 100.

Concept:

The history of human population growth is a fitting real-world example of exponential growth.

Objectives:

Students will be able to:

- Describe the trends of human population growth.
- Explain the basic attributes of exponential growth (slow start, fast finish).

Subjects:

Geography, History, Math, Science, Social Studies

Skills:

Observing patterns, critical thinking, graphing

Method:

Students experience the changing pace of population growth by simulating the Earth's population growth over the last 500 years.