

Getting the Students Ready to Use the Globe

Use these teacher-directed lessons to introduce the globe.

There are no student-copy masters involved with this set of lessons. These are teacher led lessons with student participating by using the globe in small groups.

A globe is the only accurate way to study the whole Earth. A globe has not distortion. Shape, size, distance and direction are all shown accurately on a globe.

The advantage of the globe is that it promotes visual accuracy. Students need to use a globe frequently if they are to form accurate mental maps.

The advantage of the world map is that you can see the entire world at one time. The disadvantage is that world maps distort shape, size, distance, and direction. It is very important that students understand the differences between a globe and a world map. The following series of exercises will demonstrate some of these differences. The students should be near a globe. The teacher will need a world map. At the end of this lesson the students should be able to describe specific examples of the advantages of the globe when compared to the world map.

Matching the Globe with the Map

Have the students place their globe in the reversible mounting, which provides the students with a clear view of the globe.

Shape Differences

Pull down the world map and circle Africa. Hold the globe so that Africa is facing the class and position the globe so that Africa is in front of, and slightly below, Africa on the world map. Do they look similar? Discuss how the globe and the map are alike and how they are different. Now circle the portion of Antarctica shown on the map and compare this to Antarctica on the globe.

Continue to compare the different shapes as they appear on the globe with a world map. Emphasize the concept of "thinking globally." The globe is

accurate. The world map is not.

Do we think Flat?

If students tend to think of countries in Europe and Asia as being east or west of them they may be thinking "flat". A good way to introduce spherical thinking is to have the students predict what is opposite (on the other side of the globe.) Each time a location is mentioned have the students find and circle the location on the map. Using the map first, have them predict what is opposite the following locations. Then do the same using the globe. The correct answers are:

Name of Continent & Specific Location

1. Antarctica
2. North America (Chicago, USA)
3. Australia (Perth, Australia)
4. South America (Buenos Aires, Argentina)
5. Europe (Paris, France)
6. Asia (Kabul, Afghanistan)

Opposite

- The Arctic Ocean
- The Indian Ocean,
Southwest of Perth,
Australia
- Near Halifax, Nova
Scotia, eastern coast of
Canada
- North of Shanghai, China
- Near Wellington, New
Zealand
- The South Pacific

7. Africa (Kinshasa, Zaire)

Near the center of the
Pacific Ocean

Circle Chicago and Bombay, India on the map. Have the students draw a line between these two points. The line should represent what they think would be the shortest distance between these two locations. Do the same thing using a globe. The shortest distance on the globe would be to travel across the Arctic Ocean. Compare the differences. The globe shows the most direct route.

Next circle, Buenos Aires, Argentina, and Sydney, Australia on the world map. Have the students draw a line that they think would show the most direct route between these two locations. Now do the same thing using the globe. The shortest distance would be to travel over Antarctica.

Compare Sizes

Globes show correct size. Maps do not. Using the world map circle Greenland and circle the country of Sudan in Africa. Ask the students which is the largest. Have the students circle the same two countries on the globe. Sudan is larger. The area of Sudan is 967,494 sq. mi. (2,175,600 sq. km.). Greenland is 840,000 sq. mi. (2,175,600 sq. km.) Maps distort size as well as shape.