



### 3. Comparing a Globe and a Map ; Field Visits

Friends, we have seen how meridians and parallels are drawn on a globe. We have also learnt how they are used to determine the location.

In this lesson, let us compare a map and a globe and understand the difference between them.



#### Do it yourself !

Make groups of 5 or 6. Each group should have a world map, a map of India and a globe. Study them and answer the following questions.



**Instruction for Teachers:** Please facilitate availability of a globe and maps to each group.

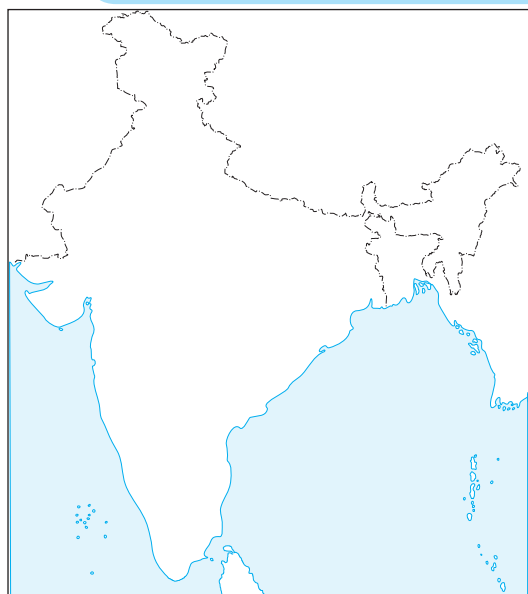


Figure 3.1 : (a) World Map, (b) Outline Map of India, (c) A Globe

- Which device is flat?
- Which device is spherical?
- Which of these devices allows you to see the entire area of the earth at the same time?
- Which device allows you to see only one side of the earth at a time?
- Which device can be used for studying a particular region in detail?
- Which device can be called a model of the earth?

### Explanation

You must have observed that–

- Maps are two dimensional whereas a globe is three dimensional.
- Two-dimensional objects have length and width. The product of length and width defines area.
- Three-dimensional objects have length, width and height, the product of these provides volume.
- Maps can be used to study the whole world or also regions of limited extent.
- However small or large the globe, it is only a representative model of the entire earth.

**Two dimensional** – A surface having two dimensions, length and width, is called two dimensional, e. g., paper, blackboard, table top, land, etc.

**Three dimensional** – An object having three dimensions such as length, width, height (or thickness) is called three-dimensional, e. g., a duster, box, glass, pot, hill, the moon, etc.

### \* Field Visit (Educational trip)

A field visit is an important method of studying geography. Field visits help us to understand the geographical and social conditions of a place. Moreover, it provides an opportunity to directly interact with the local people and understand their problems.

With the help of your teacher(s), visit one of the following places to know the geographical condition of the area – a planetarium, post office, bus station, mall, hill, sea coast, small scale industry, etc. Study places like these to observe and record various features.

Your teacher will guide you at the time of the field visit. Prepare a questionnaire with the help of your teacher and take interviews wherever it is necessary. Note down the responses, make sketches or other notes.



### Do you know?

In order to draw a map of the whole world, first a wire globe is prepared. A source of light is placed inside the globe. Then the projection of the wire graticule is obtained on paper. This projection is used to draw maps. Thus, a graticule is essential for drawing the map of the earth or any part of it. That is how a two-dimensional map is obtained on paper from a three-dimensional globe.



Light inside the Globe



A Map



### I can do this!

- Classify different objects including a map and a globe according to their dimensions.
- Use a map or a globe as per requirement.

## Geography Museum

'EARTHA' is the largest operational globe in the world. It is housed at Yarmouth in the State of

Maine in the United States of America. The rotation and revolution speed of this globe is maintained as per that of the earth.



Figure 3.2 : Eartha

### Exercises

- (1) What characteristics of two and three dimensional devices did you note?
- (2) What features can be shown on a very small globe?
- (3) Which device will be suitable for understanding the concept of day and night on the earth?
- (4) Which device will be useful to show your village / city?
- (5) Which device can be easily carried from one place to another?

#### \* Activity

Make two groups. Each group should ask the other group to find the locations of different places on the globe. You may also do this with a map.

### Websites for reference

- <http://www.kidsgeog.com>
- <http://www.wikihow.com>
- <http://www.ecokids.ca>



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