

CHAPTER 8

THE EARTH AND THE GLOBE

The Earth Is a Sphere

You must have learnt in your earlier classes that the earth is like a ball or a sphere and also seen pictures of it. However, looking at it from where we stand the earth does not look round. This is because the earth is so big that we can never see the whole of the earth standing on it. Indeed, we have to go out into the sky, into the distant space to see the entire earth. We can go all the way to the moon and see the earth.

Yes, several people who have gone up by rockets deep into space, have seen the earth from there. As we are able to see the moon and sun from the earth, in the same way, the earth, like the moon, seems like a ball hanging in the sky. A major portion of the earth looks blue. This is the colour of the oceans. Large masses of land are also visible. We live on these land masses. Some white patches of clouds are also seen floating around. All this can be seen in the photographs of the earth taken from space.

Given below are two photographs of the earth as seen from the moon! You can see the earth 'rising' over the landscape of the moon. Only a portion of the earth is visible - only that portion will be visible from the moon which faces the sun. The other portion of the earth which is not visible is not facing the sun and hence will be having night.

LAND MASSES AND WATER BODIES

There are huge masses of land on the earth. Surrounding the land are huge water bodies. The masses of land are called continents and the enormous water bodies are called oceans.

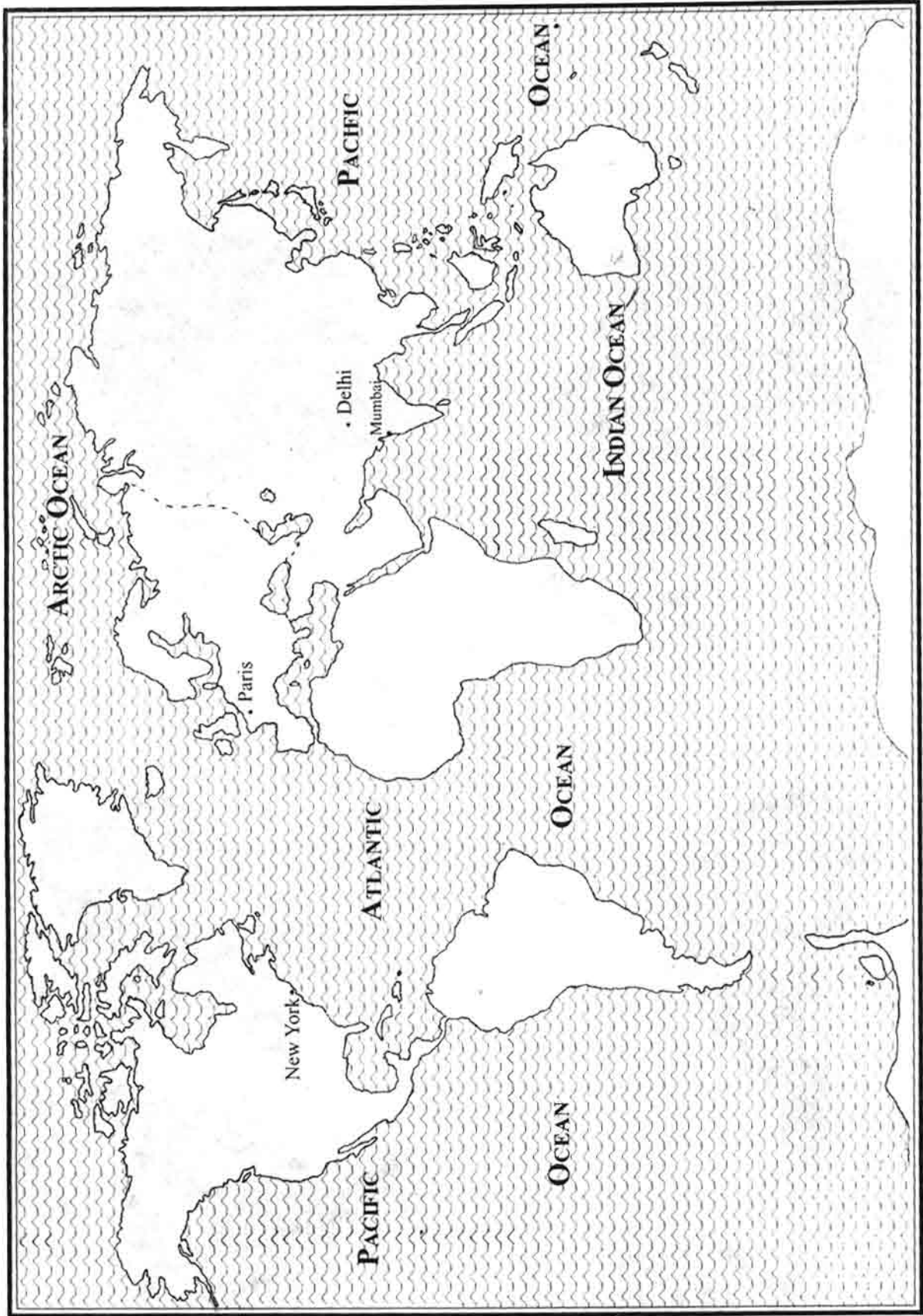
Look at the map of the world on page 115, in which all the continents and oceans are shown. The oceans are shown by wavy patterns.

- *Shade the oceans blue. The rest are land masses. Colour them by pencil. Now you can see the distribution of land and water on the earth.*



Fig. 1 & 2 Earthrise over the moon.

MAP 1. WORLD - LAND AND WATER ON THE EARTH

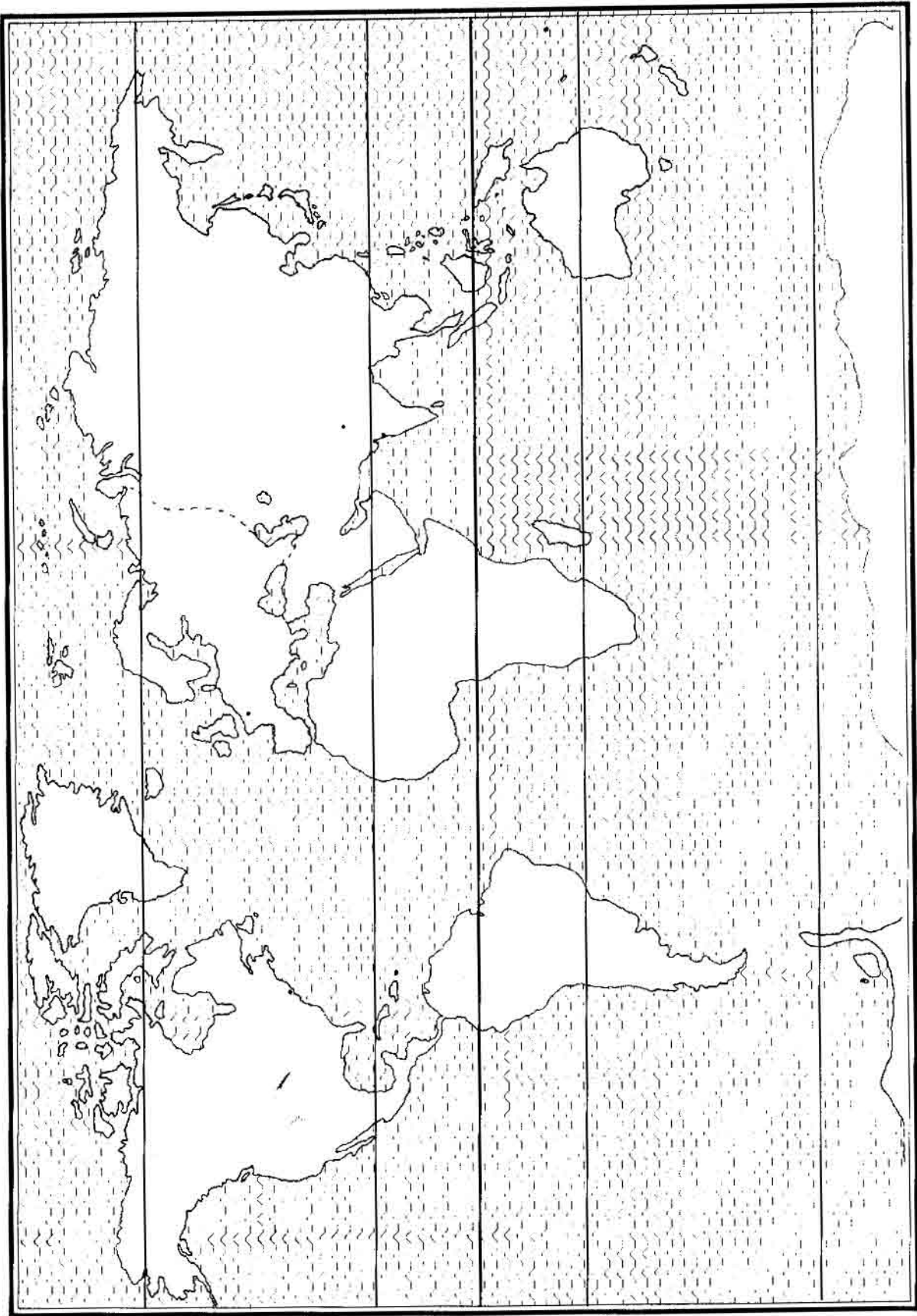


Continents and Oceans

There are seven continents on the earth. The shapes of some of the continents are given here along with their names. With the help of these figures identify the continents on Map 2 given on the next page. Colour each continent in a different shade and also write down its name on the map. You will not find the figure of Antarctica among these. Look for Antarctica on the globe. It is the southern-most continent.



MAP 2. WORLD - CONTINENTS AND OCEANS



Almost every continent has many mountains, ranges, plateaus and plains, rivers and lakes. They also have several countries in which millions of people live. You will read about Asia and some of its countries in the following chapters.

- *See the names of oceans in Map 1 and write them on Map 2 in the proper places.*
- *Have you ever been to the seaside? Can you cross an ocean or a sea the way you cross a lake or a pond?*

Oceans are quite huge and deep. Winds whip up very high waves on them. We need large ships to travel on oceans. It takes many weeks to sail from one end to the other. For days together, no land is visible, only vast stretches of water. There are many pictures of ships shown in this book. Look at them.

- *If you have to travel from Delhi to Paris, can you go by land or do you have to cross any sea?*
- *Which continent did you start from and to which continent did you go? Did you cross any ocean? Name it.*
- *If you have to travel from Mumbai to New York, is it possible to go via a land route?*
- *Trace the routes with your finger on the map.*

GLOBE

A globe is a model of the earth, just as you would make a small bullock-cart using clay. All the countries of the world are shown by different colours on the globe. The oceans are shown blue.

Keep your finger on India and take it forward in any direction, go round the globe and bring it back to the same place. Only you must not take your finger off the globe. All the students can do this activity choosing any country to begin with. Actually the earth is also like that; you can start from any place travel round the earth and return to the starting place.

Equator, Tropic of Cancer, Tropic of Capricorn and the Polar Circle

While looking at the globe you must have noticed that there are several horizontal and vertical lines on the globe. What are these? These lines are there to help us to locate a place on the globe. They are not really lines drawn on the earth but imaginary lines drawn only on globes and maps. The horizontal lines drawn from east to west are called 'Latitudes'. The vertical lines drawn from the north to south are called 'Longitudes'. With the help of these lines we can locate any place on the earth.

To denote the exact half of the earth, a thick black line is drawn on the globe. It is called the 'Equator'. Find the Equator on the globe. This line divides the globe into two halves - northern and southern. The two halves are called the Northern Hemisphere and the Southern Hemisphere. The Northern Hemisphere extends from the Equator to the North Pole and the Southern Hemisphere extends from the Equator to the South Pole.

- *Name the continents through which the Equator passes.*
- *Find a line called the Tropic of Cancer and a line called the Tropic of Capricorn, to the north and south of the Equator, respectively. Run your finger along the two Tropics and note the names of the continents that they pass through.*
- *Which of these lines passes through India?*
- *Is India situated to the north or the south of the Equator?*

If you move further northwards of the Tropic of Cancer you will come across the Polar Circle. There is another Polar Circle to the south of the Tropic of Capricorn.

The Poles

You would have already noticed that the two ends of the earth are a little flat. These are called the Poles. The northern end is the

North Pole and the southern end is the South Pole.

- *Locate the Poles on the globe.*
- *Name two places near each of the two Poles.*

Cold and Hot Regions on the Earth

The Poles are covered with ice all round the year. The 'Polar region' which extends from the Poles to the Polar Circles remains very cold all through the year.

As you move from the Polar Circles towards the Equator it gets warmer. The region near the Equator is hot all through the year and there is also a lot of rain during the year. This region is known as the 'Tropical Region'.

The region between the Tropic of Cancer and the Polar Circle is neither too hot nor too cold. This is the 'Temperate Region'. There is also a temperate region to the south of the Tropic of Capricorn.

In the following lessons you will read more about the places and peoples living in these different regions.

- *The equator lies to the _____ of the North Pole and to the _____ of the South Pole.*
- *Which of these is correct?*
 - *Australia is between the Equator and the Tropic of Cancer.*
 - *Asia starts at the North Pole and ends at the Tropic of Cancer.*
 - *North America is near the South Pole.*
 - *The Tropic of Capricorn passes through South America.*
 - *Equator, Tropic of Cancer and Tropic of Capricorn pass through Africa.*
- *In the figure given below shade the Tropic, Temperate and Polar regions with different colours and write their names in the right places.*

