CLASS VIII PHYSICS

SCIENCE

STARS AND THE SOLAR SYSTEM

THE STARS

What other objects do you see in the night sky? There is a large number of stars in the sky. Observe carefully on a dark night and from a place away from a big city. Are all the stars equally bright? Are they of the same colour? In fact, stars emit light of their own. The Sun is also a star. Why does it appear so large compared to the other stars?

Which appears bigger, a football placed near you, or a football placed at a distance of 100 m? The stars are millions of times farther away than the Sun. Therefore, the stars appear to us like points.

In fact, the stars are present in the sky during the day-time also. However, they are not visible then because of the bright sunlight.

Observe some prominent star or a group of stars in the sky for about two hours or more. What do you find? Do you find any change in the positions of stars in the sky?

You will find that the stars appear to move from east to west. A star which rises in the east in the evening, sets in the west in the early morning. Why do stars appear to move from east to west? Let us find out.

Paheli recalls that when she is in a moving train the nearby trees and buildings appear to move in the backward direction.

If the stars appear to move from east to west, could it mean that the Earth, rotates from west to east?

There is actually a star, the pole star, which is situated in the direction of the earth's axis. It does not appear to move