

Chapter 19 : Motions Of The Earth

Curricular Goal :

CG-6 Understands the spatial distribution of resources (from local to global , their conservation, the interdependence between natural phenomena and human life, their environmental and other implications.

Competencies :

C-6.1 Explains key natural phenomena such as day and night, seasons, climate, weather, ocean cycles, soil formation, the flow of rivers and how they are spatially distributed.

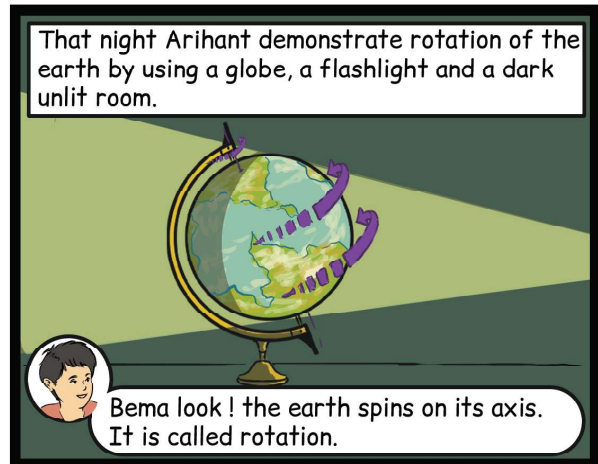
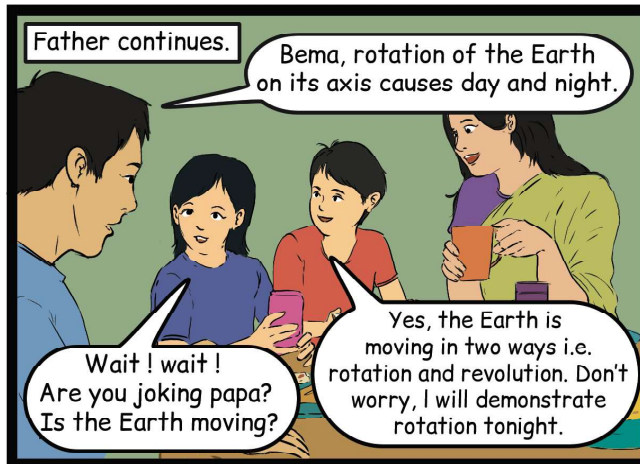
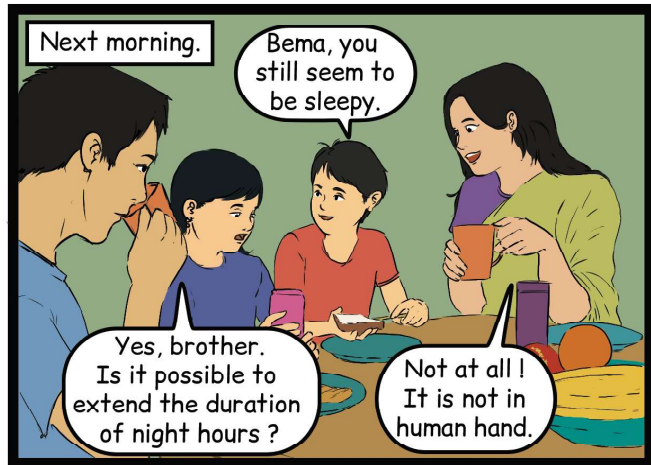
Learning Outcomes :

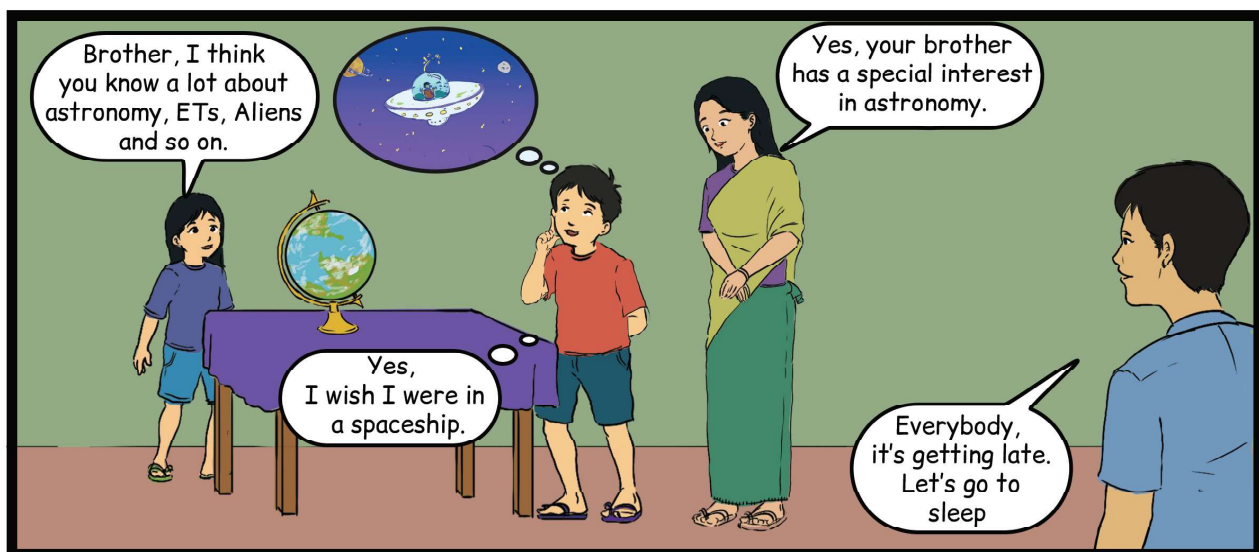
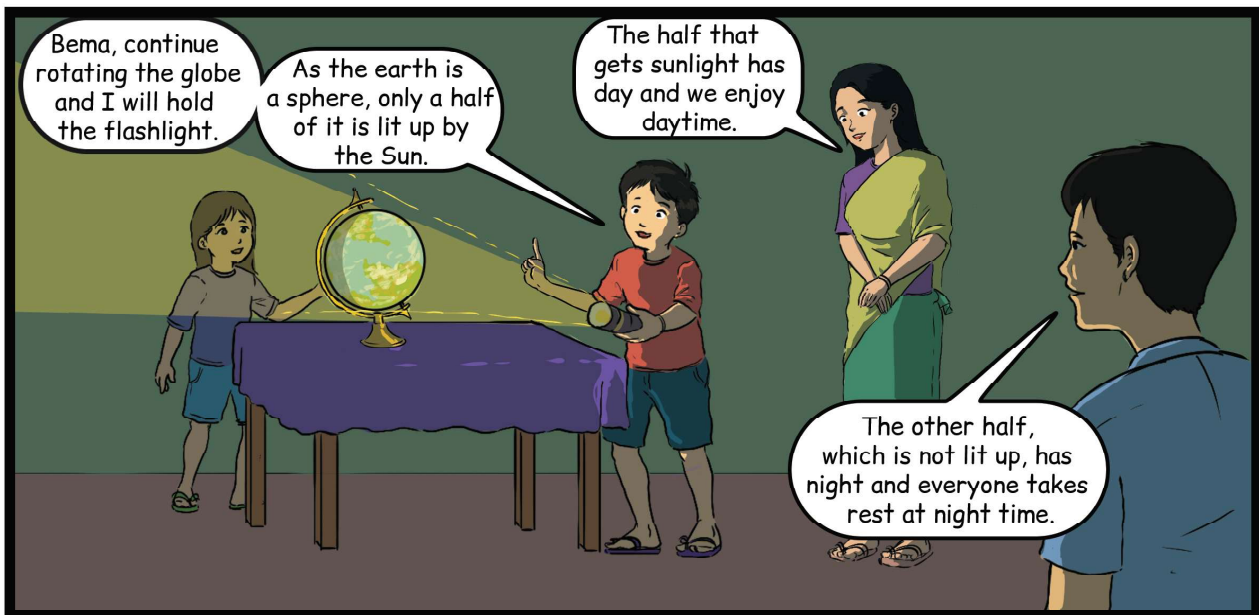
At the end of the lesson, the students will be able to

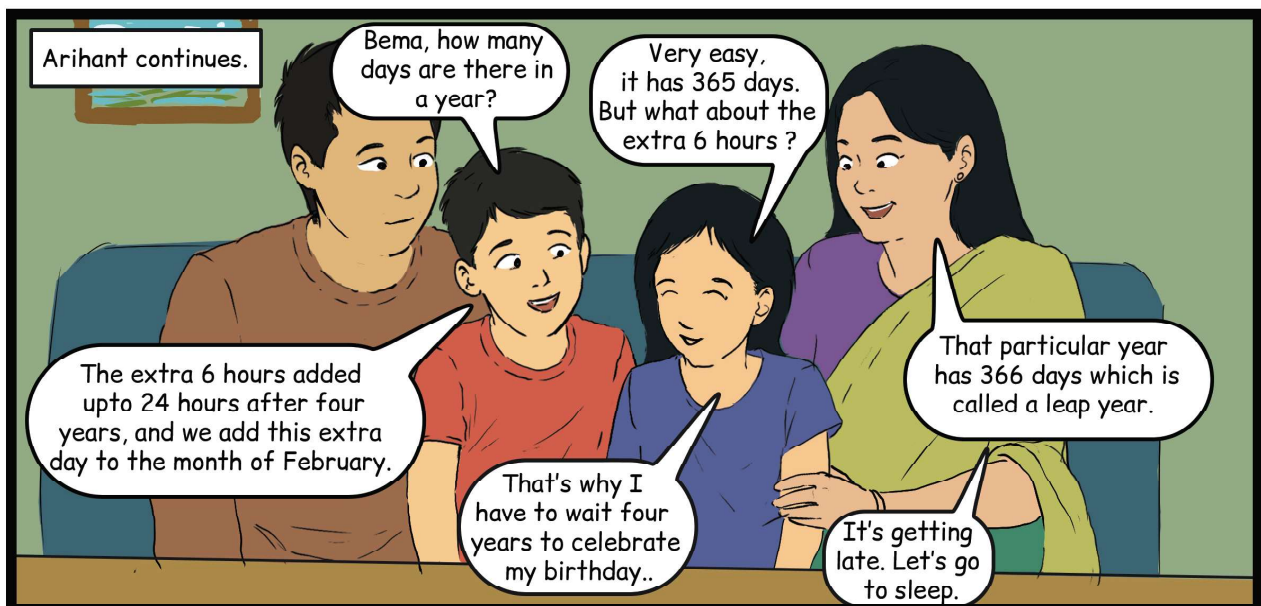
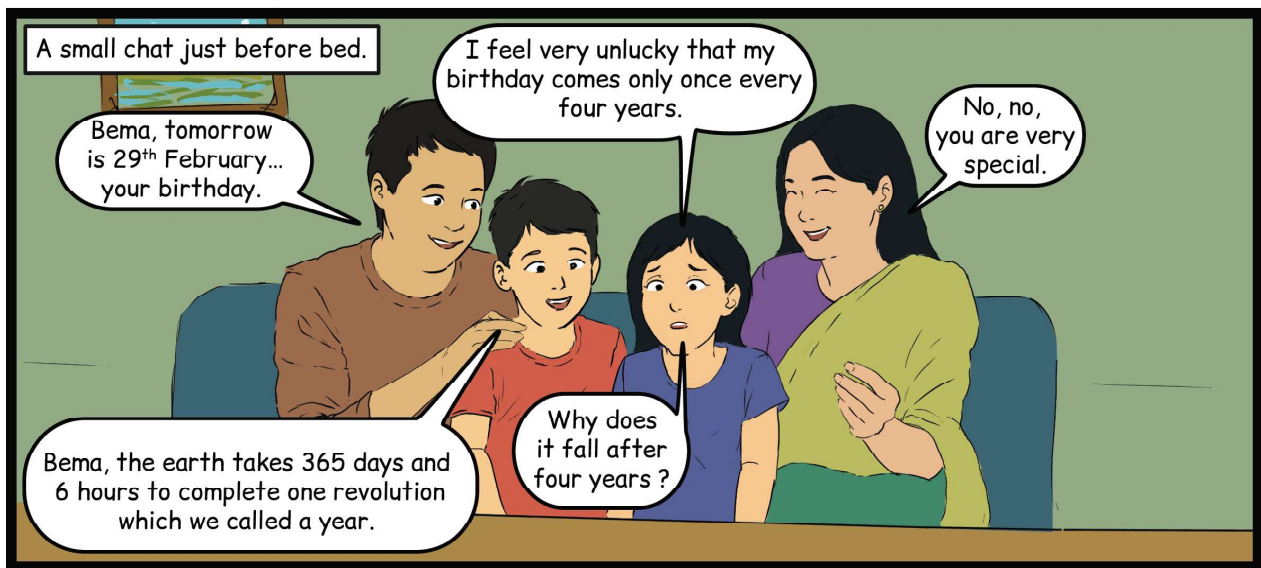
1. Demonstrate the causes of day and night.
2. Explain the causes of the seasons.
3. Understand the concept of a leap year.

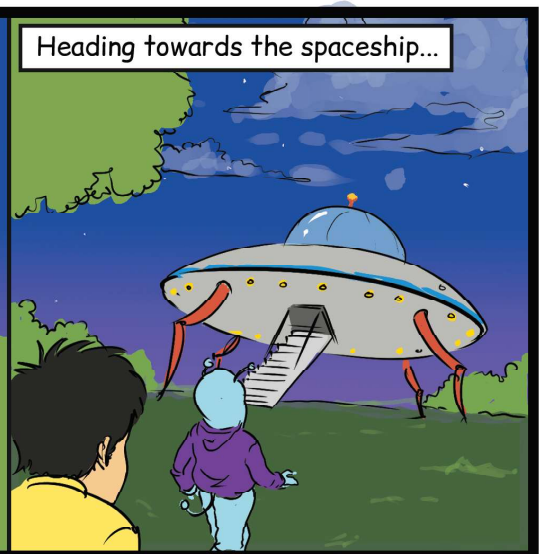
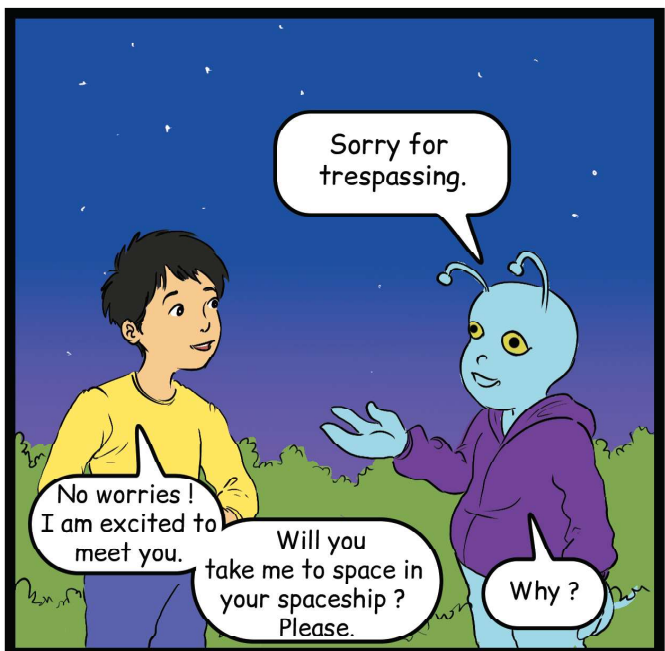
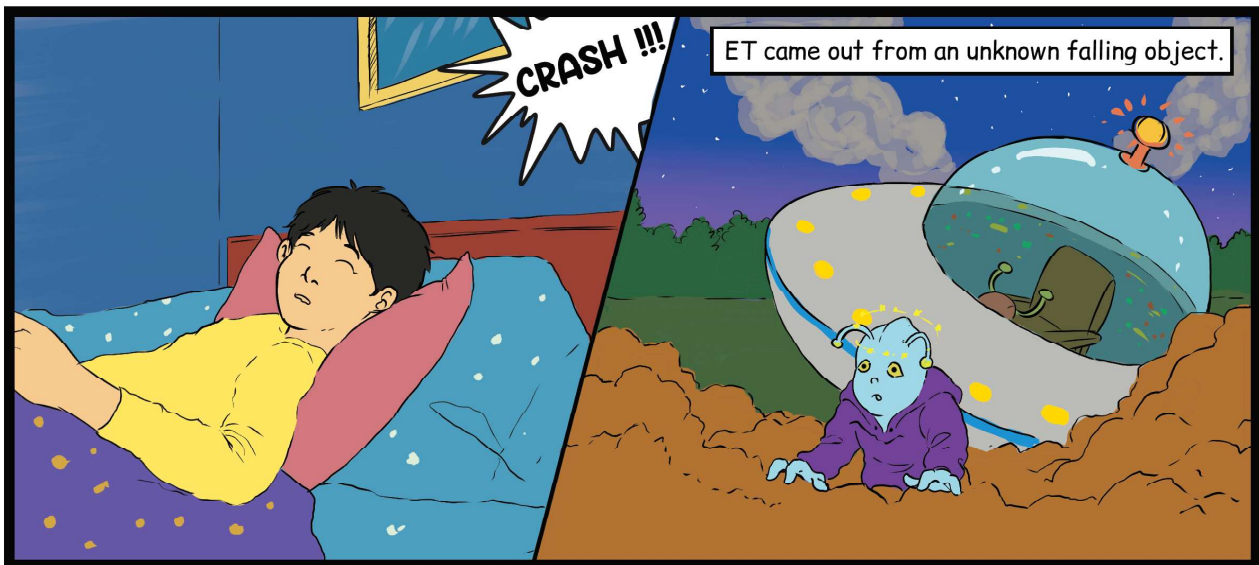
CHAPTER 19

MOTIONS OF THE EARTH







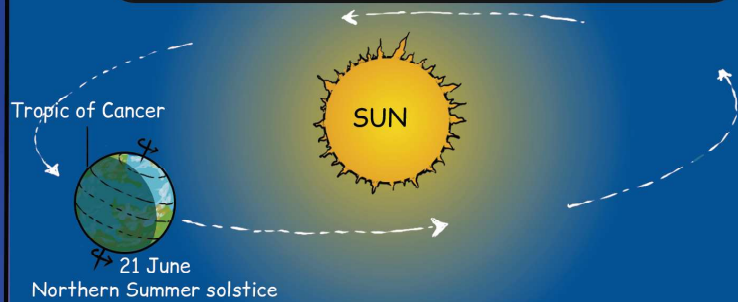


Isn't it amazing how quickly we arrived in space.

My spaceship is as fast as the speed of light.



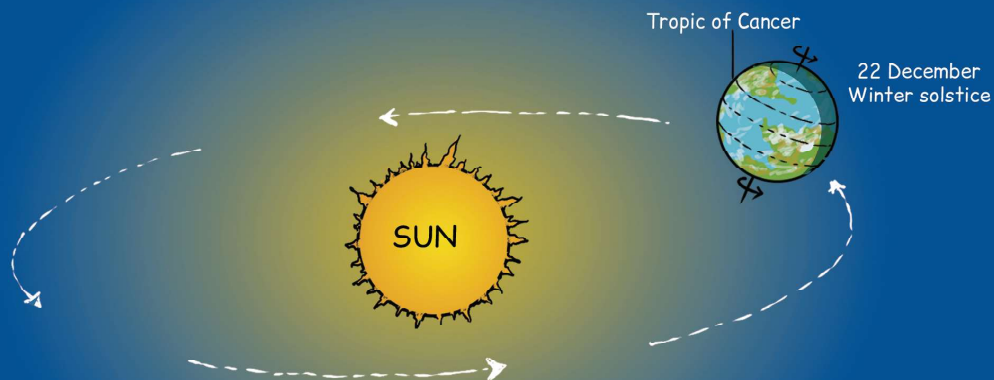
On 21st June, the sun is overhead at the Tropic of Cancer and the northern hemisphere is tilted towards the sun.



It is the summer solstice for the northern hemisphere which has the longest day and shortest night. De-Za-Vu, take me to the opposite side.



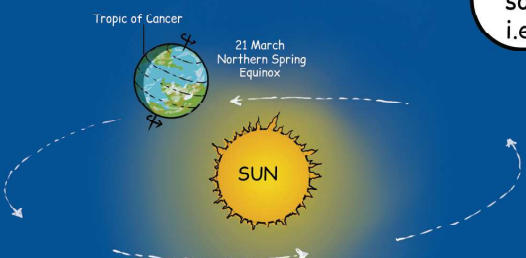
It's 22nd December where the Sun's rays are vertical over the Tropic of Capricorn and the Southern hemisphere is tilted towards the Sun.



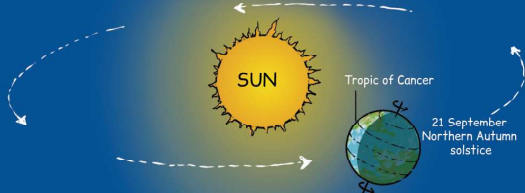
It's winter solstice for the Northern hemisphere which has the longest night and shortest day.



Watch out the beautiful view of 21st March and 23rd September, where the Sun rays fall vertically at the equator.



So, the Sun's rays can reach both the north and south poles. These two days are called equinoxes i.e. 12 hours of day and 12 hours of night.



March is the spring season in the Northern hemisphere and March 21st is known as Vernal Equinox.

September is autumn in the northern hemisphere and September 23rd is known as the Autumnal Equinox.





Activity

1. Divide students into groups for a thought provoking discussion on “Leap Year”.
2. Demonstrate the causes of day and night with the help of a globe and flashlight.
3. Draw a diagram showing the relative position of the earth with the Sun on 21st June and 21st March.