

Day and night

Outstanding Science Year 5 - Earth and space - OS5D007

National Curriculum Statutory Requirements

5D4 - use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

Learning Objective



I can explain how day and night are caused.

Me:   

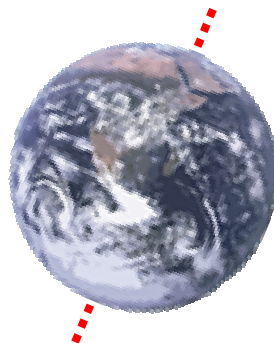
Teacher:   

Day and night

Ancient people noticed that the Sun appeared to move across the sky. They noticed that after a period of darkness, the Sun appeared to rise from beyond the horizon in the east. As the morning passed, the Sun appeared to rise higher and higher in the sky until midday, when it reached its highest point. It then appeared to move lower in the sky before setting behind the horizon in the west, leading to another period of darkness. Ancient people believed that the Sun was moving around the Earth, but they were mistaken.

The Sun appears to move across the sky, but this is because the Earth is rotating on its axis. If you stand and turn around on the spot, the entire classroom appears to be moving around you, but this effect is caused by your rotation.

The Earth rotates on its axis (an imaginary line running between the North and South poles) once every 24 hours, or once a day. This is what causes day and night.



Activity

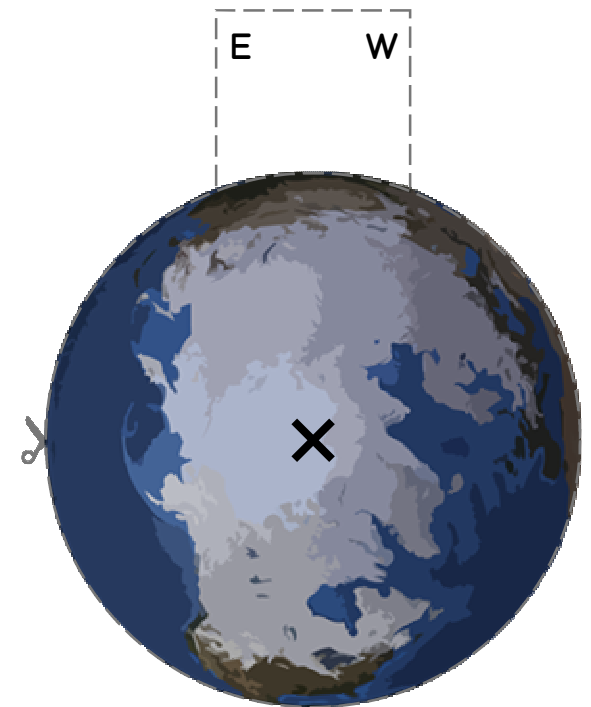
Cut out the picture of the Earth. Draw a picture of yourself in the space provided. Use a split pin (brass paper fastener) to attach it to the diagram. Turn the Earth to simulate the effect of day and night. Cut out the descriptions and place them in the speech bubbles in the right place, explaining what you would be experiencing at that time.

When I look to the west, I can see the Sun setting under the horizon.

When I look to the east, I can see the Sun rising over the horizon.

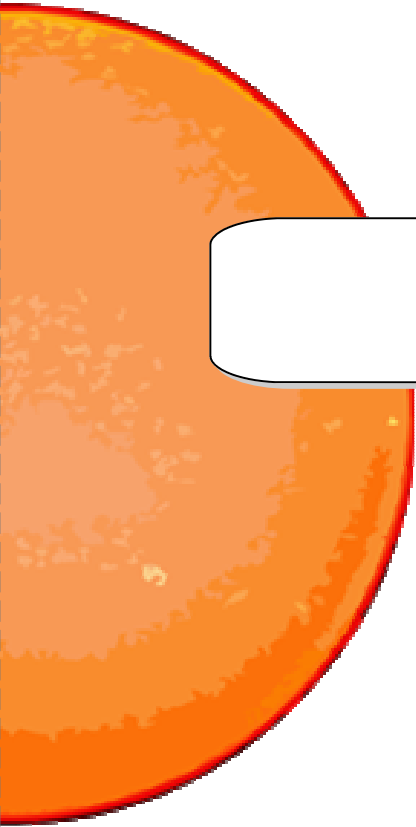
It is midnight, and I cannot see the Sun at all.

The Sun is at its highest point in the sky. It is midday,

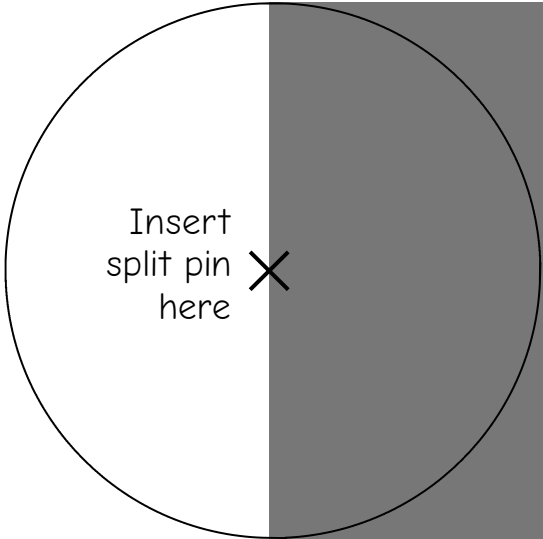


Night and day (not to scale)

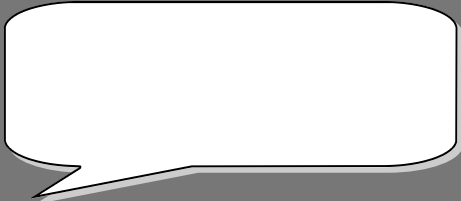
Earth (viewed from above the North Pole)



The Sun (viewed from above its North Pole)



Insert split pin here X



Direction of Earth's rotation

