

Day and night

Test yourself

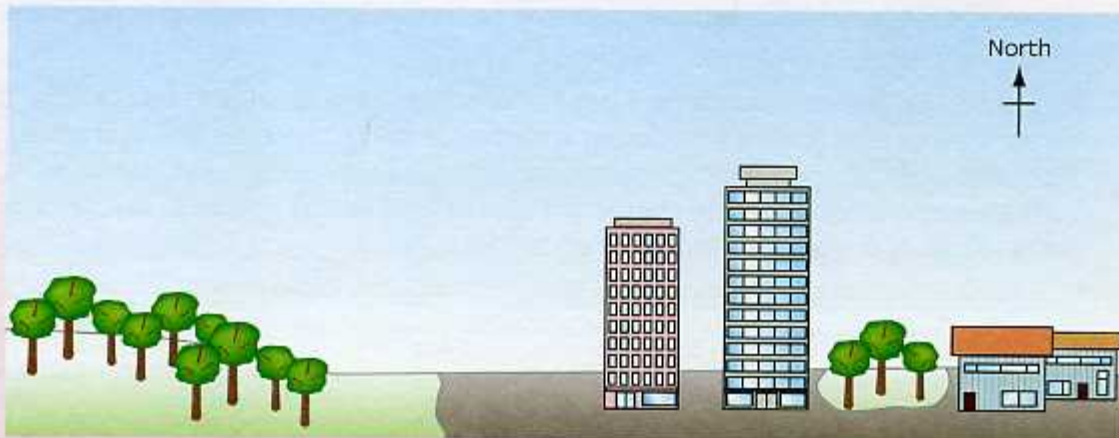
4-5

- 1 Select the correct choices from the words in bold to complete the sentences.
- Day and night occur because the Earth **orbits the Sun/spins on its own axis**. The Earth spins at a constant speed and it takes about **one year/24 hours** to make a complete spin (or rotation). Light from the Sun falls on one half of the spinning Earth and the side facing away from the Sun experiences **day/night**. The Earth orbits the Sun once in **24 hours/28 days/365¼ days**.

Creative

5-6

- 2 a Your Science class visits a local primary school and the class teacher asks you to explain why the days are longer in summer and shorter in winter. You decide to draw a diagram like the one shown below to assist in your task.



Draw the path of the Sun as it appears to move across the sky in the summer. Label this path with an 'S'. Now draw in the Sun's path for the winter months and label it with a 'W'.

- b Explain to the class why the Sun only **appears** to move across the sky. (Be sure to include in your explanation details of when and how this idea developed.)

Digital

7-8

- 3 A photograph of the stars can be taken at night by pressing the shutter on a camera and leaving it open for several hours. By aiming the camera at the pole star, the stars can be tracked over this period of time.

Research photographs taken of the pole star on image sites on the Internet and use them to persuade a classmate that the Earth is indeed rotating on its axis.