

Y5 Earth Space

KS2 Y5 Science · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Why do we have day and night?

Step 1 · How does the Earth move?

It spins (rotates) on its axis, once every 24 hours

Step 2 · What lights the Earth?

The Sun — but it can only light the half facing it

Step 3 · So...

Your side has day when it faces the Sun and night when it faces away

Answer: Day and night happen because the Earth rotates once every 24 hours, so each place turns towards and then away from the Sun.

Check: The Sun does not move round the Earth.

2. Now try one with the steps

Why does the Sun seem to move across the sky?

Step 1 · Which way does the Earth spin?

Step 2 · What does that make the Sun appear to do?

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. What causes day and night?

2. How many hours does it take the Earth to rotate once?

3. What shape are the Sun, Earth and Moon?

4. In which direction does the Sun rise?

5. In which direction does the Sun set?

6. In the UK, in which direction is the Sun at midday?

7. When are shadows shortest during the day?

8. Is it day or night on the side of the Earth facing away from the Sun?

9. In the morning, the Sun is in the east. Which way do shadows point?

10. How many degrees does the Earth turn in 1 hour?

11. How many degrees does the Earth turn in 6 hours?

12. Give ONE piece of evidence that the Earth is a sphere.

13. It is daytime in London. Is it day or night on the opposite side of the Earth, in New Zealand?

14. The Sun appears to move across the sky. Explain what is really happening.

4. Before you hand it in

The Sun moves round the Earth to make day and night.

The Earth rotates once every 24 hours; the Sun stays at the centre of the solar system.

Night happens because the Sun goes behind the Moon or switches off.

Night = your part of the Earth has turned away from the Sun.

The Sun is directly overhead at midday in the UK.

Midday Sun is highest in the south; shadows point north.

The Earth is flat, or shaped like a disc.

The Earth, Sun and Moon are all approximately spheres.