Day and Night

With your group, you will need a torch, a globe, sticky tack and a small object the size of a marble.

What to do:

- 1. Find where you live on the globe. Using the sticky tack, attach the small object to the location.
- 2. Shine the torch on your location. Then, rotate the globe anticlockwise.
- 3. Remember to hold the torch still.



Use the word bank to fill in the missing words.

| away from | daytime | axis | Earth | rotation |
|----------------------|----------------------|----------------------|----------------------|--------------------|
| The imaginary line | that runs through | ı Earth from north | to south is called i | ts |
| A globe is tilted be | cause | is also tilt | ed on its axis. Eart | h spins round once |
| every 24 hours. Th | is is called a | · · ¹ | When our part of E | arth is facing the |
| Sun, it is | | . When our part of | Earth is facing | |
| the S | un, it is night time | | | |
| In your experiment | t, why did the torc | h have to stay still | ? | |
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| away from daytime axis Earth rotation |
|---------------------------------------|
|---------------------------------------|

The imaginary line that runs through Earth from north to south is called its **axis**. A globe is tilted because **Earth** is also tilted on its axis. Earth spins round once every 24 hours. This is called a **rotation**. When our part of Earth is facing the Sun, it is **daytime**. When our part of Earth is facing **away from** the Sun, it is night time.

In your experiment, why did the torch have to stay still?

The reason the torch is held still is because although the sun does move, it moves at a much slower rate than earth. In 24 hours the sun has moved at such a small amount that to our eyes it appears as if it hasn't moved.

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Fill in the missing words.

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| Explain wha | t you did: | | | | |
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| Explain how do | • | ccur. Include an the word bank | • | | . Use the words |
| axis | tilted | rotation | 24 hours | north | south |
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| Why does the S | un appear to m | nove in the sky? | How did you re | eflect this in you | ır model? |
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Day and Night Answers

With your group, you will need a torch, a globe, sticky tack and a small object the size of a marble.

What to do:

The children's models and diagrams should demonstrate that Earth rotates in an anticlockwise direction. It should demonstrate that places facing away from the Sun are in night time and places facing towards the Sun are in daytime.



Explain how day and night occur. Include an explanation about Earth's axis. Use the words from the word bank in your explanation:

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Example answer: The imaginary line that runs through Earth from north to south is called its axis. A globe is tilted because Earth is also tilted on its axis. Earth spins round once every 24 hours. This is called a rotation. When a part of Earth is facing the Sun, it is daytime. When a part of Earth is facing away from the sun, it is night time.

Why does the Sun appear to move in the sky? How did you reflect this in your model?

The Earth's rotation makes the sun appear to move quickly in the sky, this is because the Earth is moving faster than the sun. In the model, Earth moves anticlockwise but the Sun is moving so slowly the torch doesn't have to move.