

Science Summer 1 Week 2

Space Project 1

This week you are going to be finding out how we know the Earth is a sphere, why we have day and night and why we have different seasons.

There are 3 parts to this project. You should aim to spend around 1 hour on each part. You have one week to complete it. If you have time, there is an optional fourth session where you can do some research and pattern spotting.

Part 2 – Why do we have day and night?

Step 1:

Look at the statements below. Use what you already know about the Earth and the Sun to decide whether the statements are true or false. You could discuss your thinking with someone else that lives in your house.

The Sun moves over the Earth. Choose an item.
The Earth rotates on its axis. Choose an item.
The Sun's movement causes day and night. Choose an item.
The Earth's rotation causes day and night. Choose an item.
Everyone on Earth has day and night at the same time. Choose an item.
Daylight comes from a star. Choose an item.
An axis is an invisible line running through the centre of the Earth. Choose an item.
The moon looks light because the light from the Sun reflects off of it. Choose an item.
The Earth takes 24 hours to rotate around its axis. Choose an item.
The Earth takes 1 day to rotate around its axis. Choose an item.
The Earth moving around the sun causes day and night. Choose an item.

Step 2:

Use the video at <https://www.bbc.co.uk/bitesize/topics/zkvv4wx/articles/ztdnyrd> to find out why we have day and night. You could complete the activities on this webpage to help your understanding.

Look back at your answers to step 1 after watching the video. Are there any answers you now think you need to change?

Step 3:

Choose one of the activities below to show what you have learnt in this session. You can complete both activities if you have time but you do not have to.

1. Use a ball (or another spherical object) to represent the Earth and a torch to represent the sun. Use the items to create a model and explain to the other people in your house why we have day and night. You could video this to share with your teacher on Google Classroom. There is an example of how you could do this at <https://www.bbc.co.uk/bitesize/clips/z9fpyrd>.
2. Complete the sentences below using the key words. Some of the key words need to be used more than once and some won't be used at all. Once you have completed the sentences, draw a diagram to go with them.

moon sun day axis night twelve twenty-four

The Earth rotates around an invisible line called its **Choose an item.** _____. This means that different parts of the Earth are facing the star called the **Choose an item.** _____ at different times during a day. The part of the Earth facing the **Choose an item.** _____ is lit which means it is **Choose an item.** _____ time. The part of the Earth facing away from the **Choose an item.** _____ only gets a little bit of light from the **Choose an item.** _____ light reflected off the **Choose an item.** _____ this is called **Choose an item.** _____ time. The length of the day (**Choose an item.** _____ hours) is how long it takes for the **Choose an item.** _____ to rotate on its axis completely.