

# Science

## Earth and Space

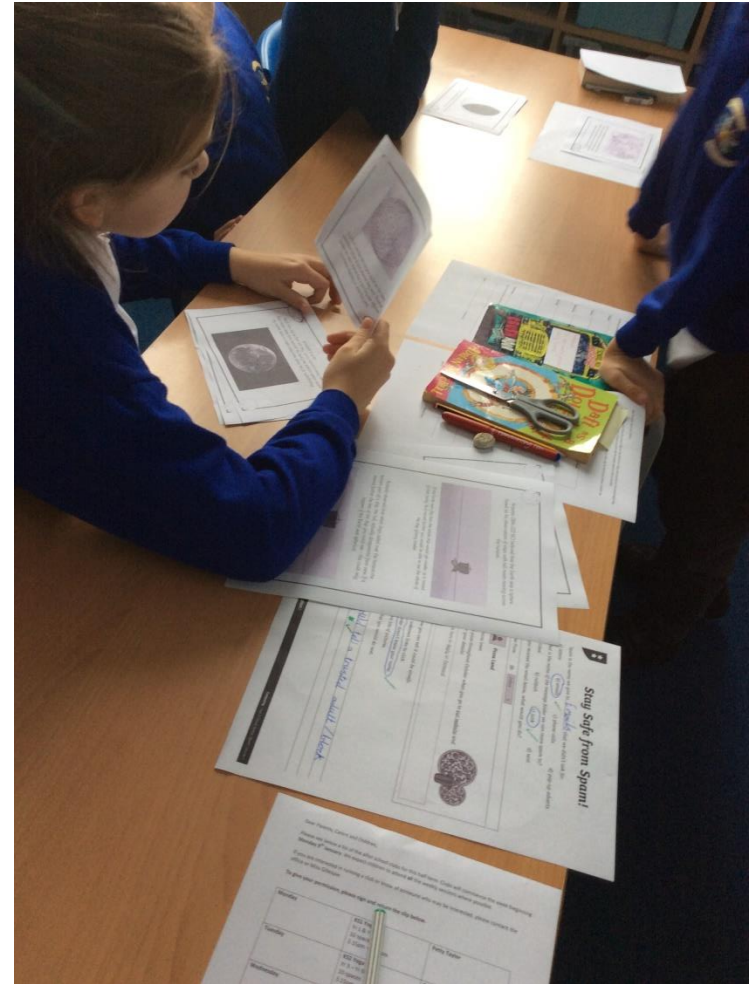
Spring 2 2023

Class Lynher

In our first lesson we learnt about the shape of the Earth, Sun and Moon and how ideas have changed throughout history using scientific evidence. We went outside to see if we could observe any evidence.



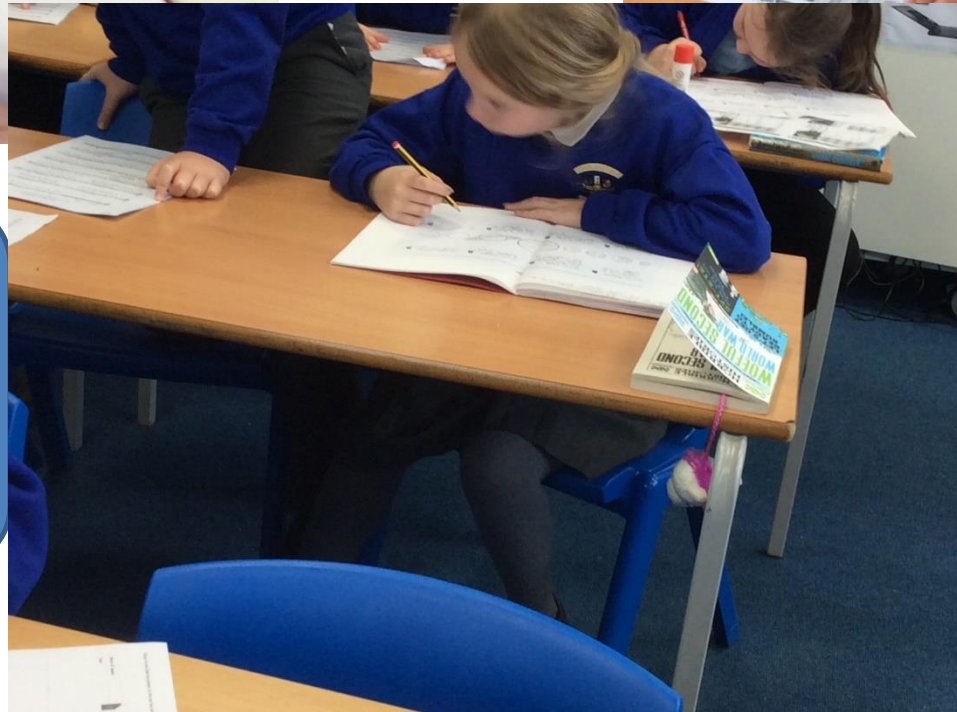
When we looked around outside we couldn't see any evidence that the Earth was spherical.



We then looked further out into our solar system and learnt the order of the planets and some features of them.

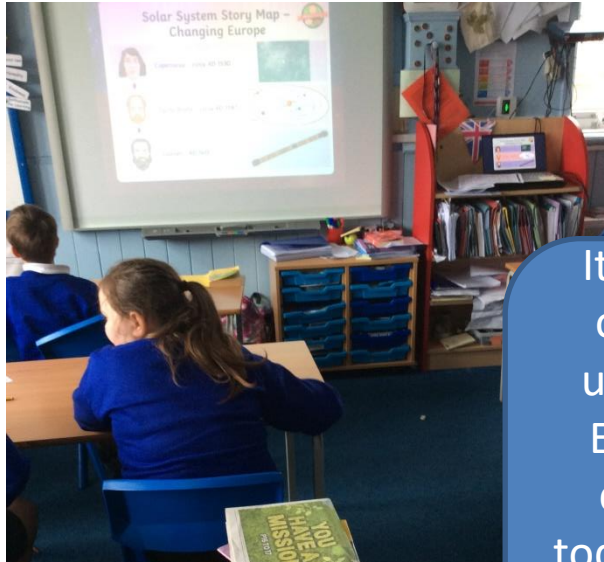


It was fascinating how different the planets are to ours. Most of the planets are named after gods.





We looked at the history of science with regards to our understanding of the universe specifically geocentric and heliocentric ideas.



It was fun to find out that people used to think the Earth was at the centre because today we know that the Earth goes around the Sun.



In this lesson we learnt about how day and night occur and how what we can see doesn't always help us with understanding the science behind the way things work.



I found it helpful that we stood up and matched the screen to help us understand how it worked.



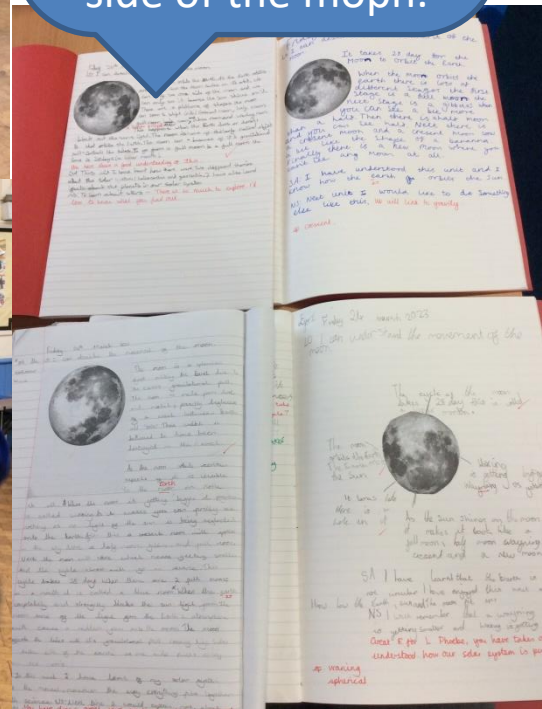
Friday 10th March 2022  
I can explain day and night.  
Initially, starting at 00:00 (midnight) the <sup>21</sup>earth will gradually rotate ~~the~~ 'around' the sun making the illusion that the sun moves around it. While the earth is rotating on its axis the night and day are slowly going to pass the sun and when we are slightly facing the sun it will be the time called sunrise and the shadows will be longer as the opacity of the object will cover more of the sun. Eventually one position of the earth will be fully facing the sun and will now be midday. The shadows will now be short as the objects casting the shadows will be <sup>directly</sup> below the sun. Gradually, the earth's rotation will bring it to sunset/evening as well as the sun will be in view and it's now another light will cast more of a pinkish glow. It will then circle back to twilight. This cycle takes roughly 24 hrs but slightly under.



In our final lesson we learnt about the moon's movement and then did an overview of our system. We have learnt a lot of facts!



I found this lesson fun because we acted out being parts of the solar system. It is interesting that we only ever see one side of the moon.





We also went to the Devonport Market Hall and watched a film that explored the ISS (International Space Station) with Tim Peake and an online workshop with Spaceport Newquay.



## Personal Development

Moral – Children will know of moral dilemmas that can result in scientific developments

Cultural – Pupils will become aware of how different cultures have contributed to our scientific knowledge



What I have learnt before:

Shadows

Where I am in the world

## Forever Facts

The Sun, Earth and Moon are approximately spherical

I know that scientific evidence can provide, or not provide, evidence for an idea

I know how the planets move in the solar system

I know we get day and night because of the rotation of the Earth

I know that the moon orbits the Earth

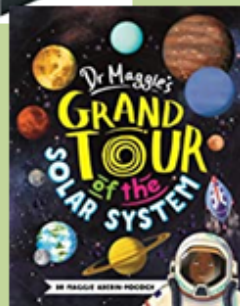
## Skills

Use straightforward scientific evidence to answer questions or support findings

I can present findings

I can identify scientific evidence that has been used to support or refute ideas or arguments

## Exciting Books



## Our Endpoint

What is Earth's place within the solar system?

## Subject Specific Vocabulary

orbit

a regular, repeating path that one object in space takes around another one

rotate

move in a circle round an axis or centre

heliocentric

having or representing the sun as the centre

geocentric

having or representing the earth as the centre

axis

an imaginary line about which a body rotates

shadow

a dark area or shape produced by a body coming between rays of light and a surface

face

be positioned with the face or front towards (someone or something)