



Year 5 Home Learning (Sheet 10)

We are continuing our Space topic and I have created lots of learning ideas around this theme. This week we are thinking about what it would be like to travel to space. We will be finding out about famous astronauts and answering the question -

Would you like to travel to space?



<p>Maths</p>	<p>Space maths</p>	<p>Maths starter: Play 'Marlon's Magical Maths Mission' and select Year 5 and 6 objectives.</p>  <p>Tim Peake was a famous British astronaut who travelled to space in 2015. Look at the facts about Tim's space mission below and answer the questions:</p> <p>186 - Days in Space. 10 - The ISS moves 10 times faster than the speed of a bullet. 2800 - Approximate number of orbits of the Earth made. 114,240,000 - Approximate number of kilometres travelled by Tim Peake during his time aboard the International Space Station. 5 cm - Temporarily, Major Peake could be up to 5cm taller than he was when he left Earth!</p>  <ol style="list-style-type: none">1) Tim spent 186 days in space, how many hours did he spend in space?2) In 186 days, the ISS made 2,800 orbits of Earth. If Tim had stayed twice as long, how many orbits would he have made?3) Tim travelled 114,240,000 km during his time in space. Imagine Tim has completed 4 missions. How many km would he have travelled altogether during 4 missions?4) Astronauts in space can grow up to 3 percent taller during the time spent living in microgravity. That means that a 6-foot-tall (1.8 meters) person could gain as many as 2 inches (5 centimetres) while in orbit. How much would you grow in space? Measure your height, find 3% and then add it to your original height. Top Tip - measure your height in cm.	<p>Play https://mathsframe.co.uk/en/resources/resource/383/Marlon's-Magical-Maths-Mission-Multiplication</p>
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5) Convert the number of km travelled to miles. Use rounding to give an approximation.

English

I can write a biography

You are going to write a biography about Tim Peake and his amazing mission to space. You need to find out as much information about him as possible including: early life, career and mission to space.



<https://www.bbc.co.uk/cbbc/joinin/bp-ask-tim-peake-a-question?collection=space-on-cbbc>

If you do not have access to a computer to research Time Peake, you could write a biography about someone in your house by asking them lots of questions about their life.

Look at the biography example below and find the key features of a biography. Remember to include all of these features in your biography writing:

- Introduction
- Description of events that are detailed and engaging
- Information organised chronologically
- Past tense
- Third person
- Quotes
- Adjectives
- Fronted adverbials
- Conclusion about how they will be remembered
- Feelings about different points in their life
- Dates

Neil Armstrong

Neil Alden Armstrong was an American astronaut who worked for NASA. He is best known for becoming the first man to walk on the Moon in July 1969.

His Early Life

Neil was born on 5th August 1930 in the state of Ohio, USA. He was the eldest of three children. Neil developed an interest in flying at a young age when his father took him to the National Air Races as a toddler. At the age of six, he flew for the first time with his father. As a teenager, Neil had a part-time job and he used the money he made to pay for flying lessons. He earned his student pilot certificate on his 16th birthday and began flying alone soon after - all before he had a licence to drive a car!

At the age of 17, Neil attended university to study aeronautical engineering. He then went on to join the US Navy as an aviator. Throughout his career, Neil flew more than 200 aircraft and was renowned for being calm and resilient, meaning that he was able to fly in difficult situations. In September 1962, Neil was accepted to the NASA Astronaut Corps; this would eventually lead to the task of landing on the Moon.

The Moon Landing

On 16th July 1969 at 1:32 p.m., the powerful Saturn V rocket left the launch pad carrying Neil Armstrong and his crew mates (Edwin (Buzz) Aldrin and Michael Collins) into space for the Apollo 11 mission. The journey to the Moon took over three days.

Once they reached the Moon's orbit, each astronaut took on a different job. Michael remained in the rocket completing science experiments and taking photographs while Neil and Buzz entered the lunar module (nicknamed The Eagle) to travel to the Moon's surface.



Art

I can create 3d models.

All astronauts need a space suit. Use the link to find more information about the history of space suits and how they have evolved over the last few decades.

Use tin foil to create your own 3D model that includes a rocket and a space suit.

<https://www.spacekids.co.uk/spacesuits/>



Create your own space mission badge. Look at the ones sewn to astronauts space suits below for inspiration. Think about the name of your mission and a picture that represents your rocket.



Science

I can distinguish between heliocentric and geocentric ideas of planetary movement.

Geocentric = The Earth is at the centre of the solar system and the planets orbits the Earth
Heliocentric = The sun is as the centre of the solar system and the planets (including Earth) orbit the sun

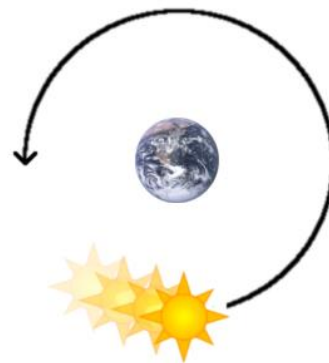
HELIOCENTRIC

Sun is the center. The earth has an orbit that rotates around the sun.



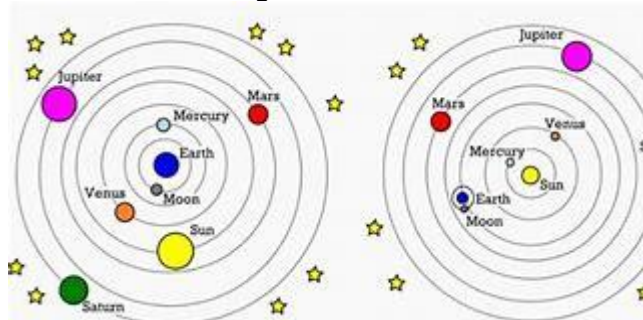
GEOCENTRIC

Earth is the center. The sun has an orbit that rotates around the earth.



Thousands of years ago, it was believed that the Earth was at the centre of the solar system and the planets orbited earth - this was called the geocentric theory. Over time, we gained more evidence and used telescopes to find out that this was not true. The evidence collated, pointed to the fact that the sun was actually at the centre of the universe and the planets orbited the sun - this was called the heliocentric theory.

Label the pictures below correctly using geocentric and heliocentric. Draw your own versions of theses. Why do you think some planets are missing in one of the models? Do you think that our belief of the heliocentric model could change over time?





<p>Spelling</p> <p>I can spell theme words</p>	<p>Learn how to spell the space words on the word mat below. Ask someone at home to test test you on these words after you have practised.</p> <ul style="list-style-type: none"> • Create a wordsearch with the spelling words in to help you learn them. • If you don't know the meaning of any of these words you could ask someone, use a dictionary or use a computer to find out. 	<div data-bbox="399 459 1268 1064" data-label="Complex-Block"> <p>Space word mat</p> </div>
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<p>Theme</p> <p>Creative thinking</p>	<p>Make a list of the good and bad things about travelling to space (I have started one below to get you going). Use what you have learnt already (and watch the videos if possible) to answer the question: Would you like to travel to space? Remember to write a detailed answer that includes reasons why.</p>	<div data-bbox="710 1254 965 1444" data-label="Image"> </div> <div data-bbox="391 1478 901 1512" data-label="Section-Header"> <p>I want to become an astronaut because:</p> </div> <div data-bbox="438 1512 1228 1702" data-label="List-Group"> <ul style="list-style-type: none"> - You would get to see space - Experience a moon-walk - Conducting science experiments to learn more about space - Experiencing an amazing life achievement - Being able to experience no gravity and floating in space </div> <div data-bbox="391 1702 941 1736" data-label="Section-Header"> <p>I do NOT want to be an astronaut because:</p> </div> <div data-bbox="438 1736 821 2004" data-label="List-Group"> <ul style="list-style-type: none"> - Missing things at home - Fever and potential illness - Sleeping arrangements - Small spaces - No gravity - Limited food - Length of time </div> <div data-bbox="1300 1075 1476 1220" data-label="Text"> <p>https://www.bing.com/videos/search?q=what+it+like+in+space&docid=608054514341642691&mid=651FB6BA7533ECE98834&view=detail&FORM=VIRE</p> </div> <div data-bbox="1300 1288 1476 1366" data-label="Text"> <p>https://www.youtube.com/watch?v=SOCixRhRGDw</p> </div> <div data-bbox="1300 1388 1476 1467" data-label="Text"> <p>https://www.youtube.com/watch?v=e3za6ITffWk</p> </div>
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