

Wednesday May 6th

Space Exploration

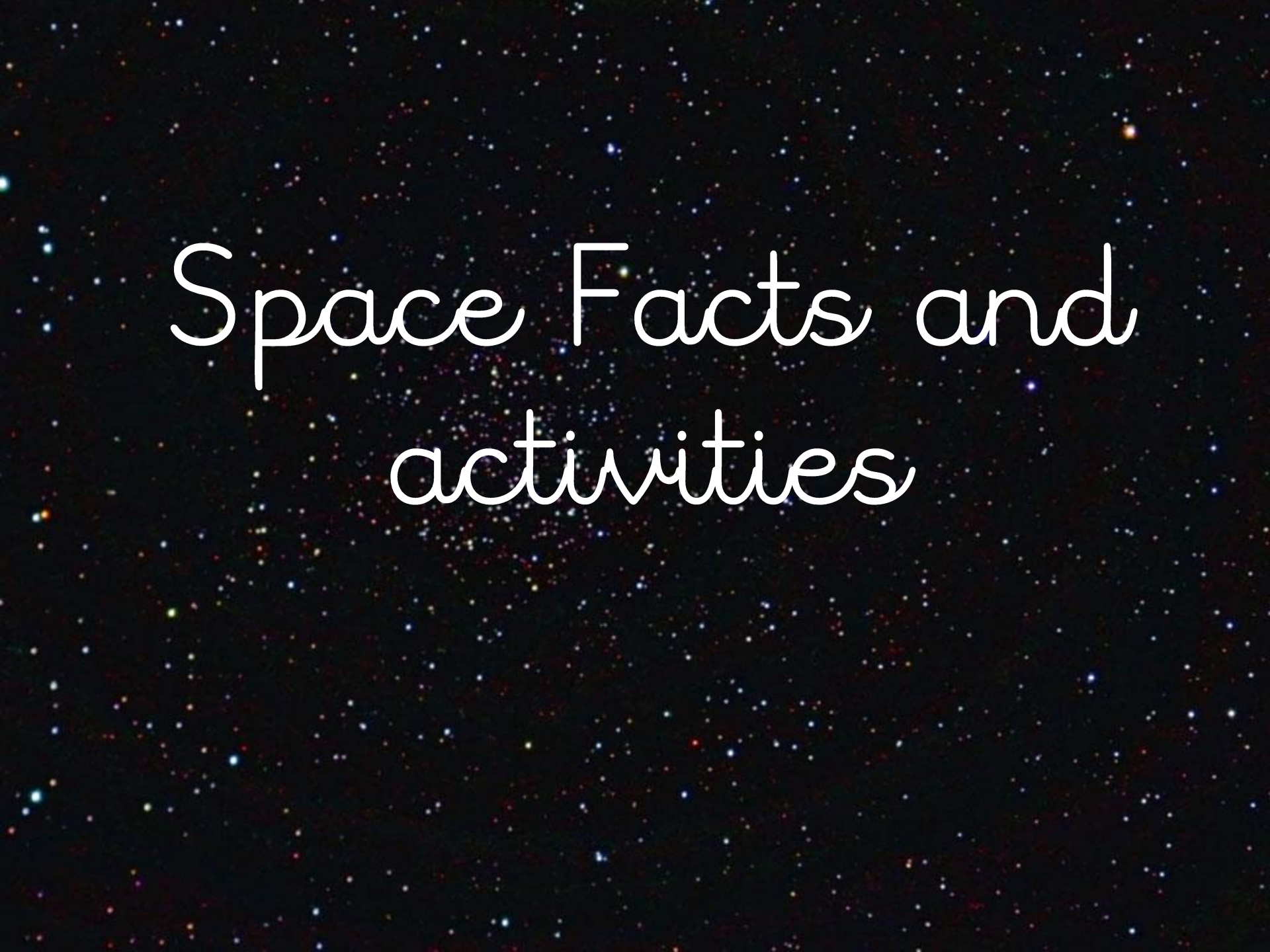
Today you will find out all about the first explorers into space including tasks your children can do.

If you have children from KS1 and KS2, choose tasks that interest all of them.

You may want to consider the separate KS1 and KS2 pages for tasks suitable for these pupils.

Please only do what you find reasonable and interesting, and nothing more!

Thomas Bullock, to infinity and beyond!



Space Facts and
activities

The Sun

The sun is a yellow star that has a system of planets around it. This is called a solar system.

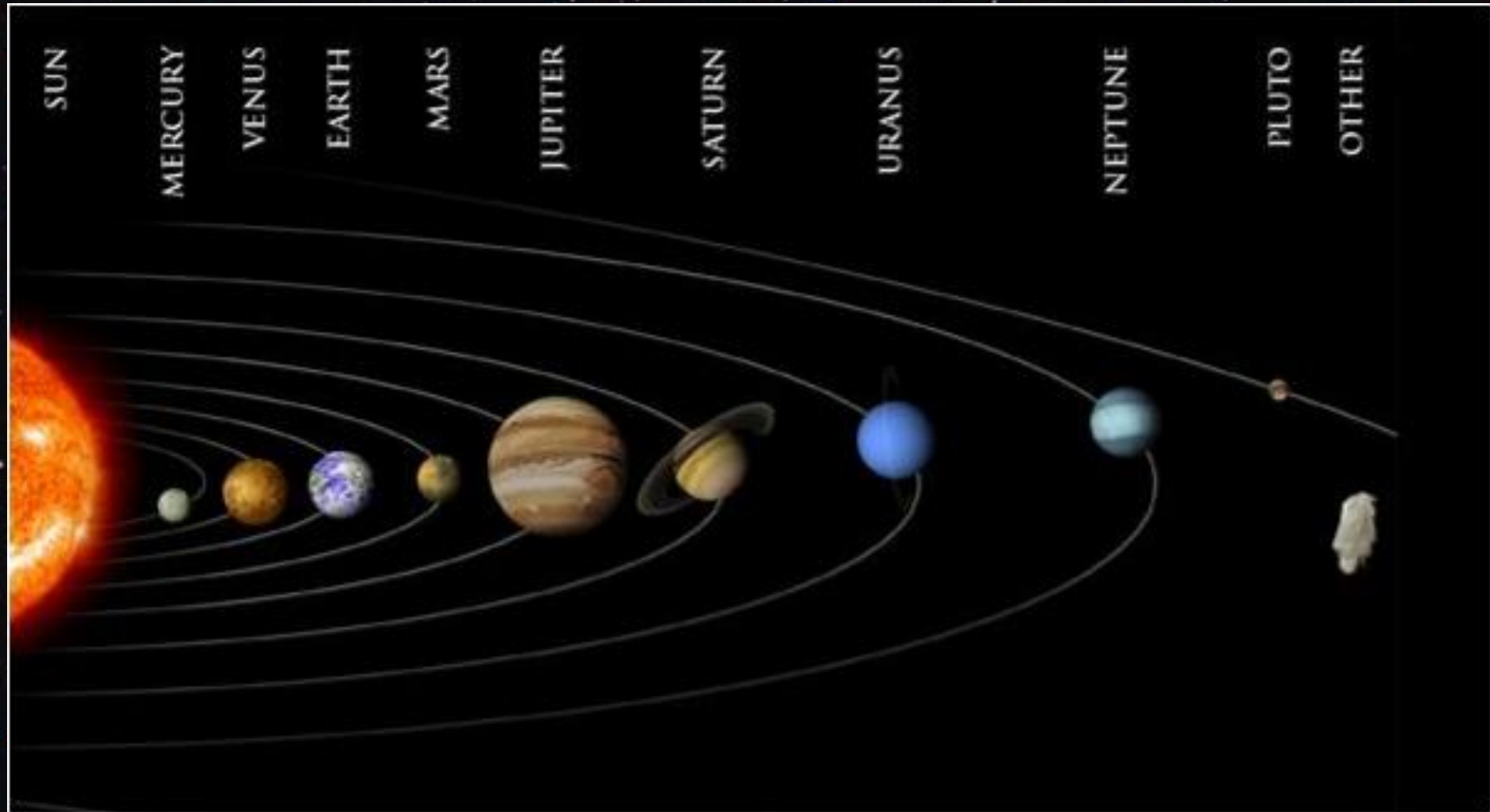
The temperature on the sun is around 5500°C !- WOW that is very hot!

The sun is nearly 93 million miles away from Earth! Is the Earth nearer to the sun or moon?

The Planets


[Explore these here:](http://amazingspacejourney.com/)

<http://amazingspacejourney.com/>



Orbit

The sun has a large amount of gravity. It is this gravitational pull from the sun that causes the planets to orbit around the sun.



Space
Exploration
Can you make a
timeline?

Space Monkey

Albert II was the first monkey in space.

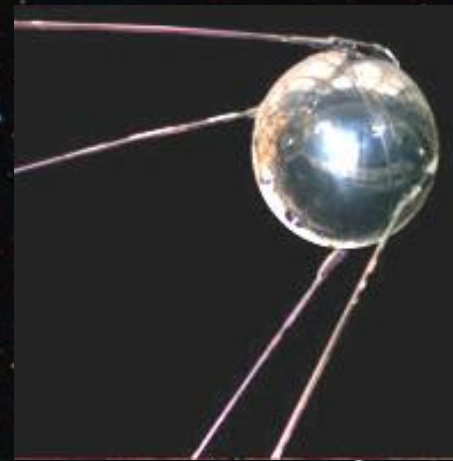


Albert went into space on 14th June, 1949 in a specially adapted American V2 rocket, that flew to a height of 83 miles from earth.

Sputnik

On 4th October 1957, Russia launched the first satellite into space; Sputnik 1, and the space age had properly begun!

Sputnik was the first satellite in orbit around the earth. Today there are over 500 working satellites in space. Sputnik means "Satellite" in Russian.



Laika



In November 1957, the Russian space dog Laika became the first animal to orbit the earth.

Laika travelled in a spacecraft known as Sputnik 2. Laika means "Barker" in Russian, and her mission helped scientists understand whether people could survive in space.

The Space Race

By 1959 Both American and Russian scientists were in a race to get a spacecraft to the Moon first.

The Russians made it first when their space-probe crash landed on the moon at a speed that would have killed an astronaut had they been travelling in it!

Yuri Gagarin

On 12th April 1961, Russian Cosmonaut Yuri Gagarin became the first man in space.

Gagarin's spacecraft, Vostok 1, completed one orbit of the earth, and landed about two hours after launch.



Man on the Moon!

<https://youtu.be/xwhnXJdJEk8>



On 20th July 1969, Neil Armstrong, and then Buzz Aldrin took "one small step" and became the first men on the moon. The first words said on the moon were "the Eagle has landed". Their spaceship, Apollo 11 worked perfectly, flying them 250,000 miles to the moon, and bringing them all the way back safely to earth.

Man on the Moon!



Now watch a video about Neil Armstrong:

- We are learning about the life of Neil Armstrong. He was the first man to explore the moon.

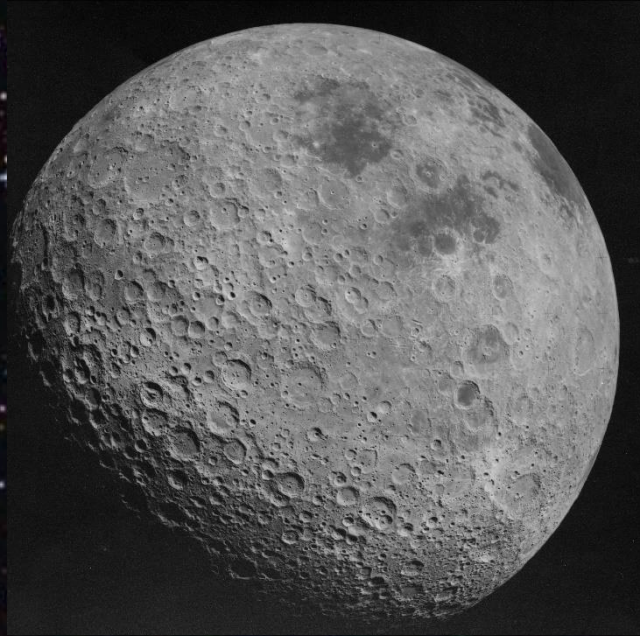
- First watch the video about him:

<https://www.bbc.co.uk/teach/class-clips-video/ks2-neil-armstrong/zr9tjhw>

Vocabulary Game



In 2 minutes how many words can you write to describe.....



Space Vocabulary



Astronaut – a person who has travelled in space

Curiosity – a large rover sent to Mars by NASA to look for signs of life

ESA – the European Space Agency, which consists of all the countries in Europe working together on missions to explore space

NASA – the North American Space Agency, which is the organisation from the USA that explores and investigates space

Orbit – When something goes into orbit, it is high enough that it keeps circling the Earth, instead of falling back to the ground.

Rocket – Rockets burn a lot of fuel to get to very high speeds very quickly. You have to do this if you want to get from the surface of the Earth into orbit.

Rover – a mobile robot sent to land on another planet or moon and explore

Satellite – a machine put into orbit around the Earth, and often used for science or communications

Spacecraft – a vehicle for travelling in space or into space

Space Shuttle – Made by NASA, this is the most famous type of spacecraft to be made.

Space station – a permanent structure in space where astronauts can live and work

Spacesuit – special airtight clothes that keep an astronaut safe and warm outside their spacecraft

Sputnik – the first satellite to be put into orbit around Earth

Voyager I and Voyager II – spacecraft that were sent to explore the outer parts of the Solar System



KSI Space EXPLORERS!



Now can you explore space and consider the following English tasks?

- Can you write a simple timeline of the order of space exploration?
- Can you try and draw or write the order of the planets?
- Can you draw a picture of an astronaut on the moon?
- Could you use a noun phrase (adjective before the noun ie fiery, red sphere) to describe a planet, the moon or sun?

Listen to the [solar system song](#). Can you repeat any information about the planets? Can you teach someone?

KS2 Space EXPLORERS!



Now can you explore space and consider the following English tasks?

- Write and imaginary recount of your own journey into space, describing your feelings, and using descriptive language to describe what you see in space ("through the tiny porthole, the Earth looked like a marble")?
- Write in character as Neil Armstrong himself, using his words in this film as a starting point.
- What would you say if you were the first person to walk on Jupiter or Neptune or even a made up planet?
- In English can you research Neil Armstrong? Maybe you can write a biography of his exploration?
- Could you explore more recent expeditions to space? Including Tim Peake.



Whole School DT/PE

Ideas for KSI



- Do you have what it takes to be an astronaut?
- Astronauts are scientists, mathematicians and engineers but must also be mentally and physically fit!
- Can you draw, design, label and build a rocket?
Be as creative using junk modeling in your house as possible!
- DT- KSI Crafts Range:
<https://spaceplace.nasa.gov/menu/do/>

We are learning to use Design and Technology skills KS2

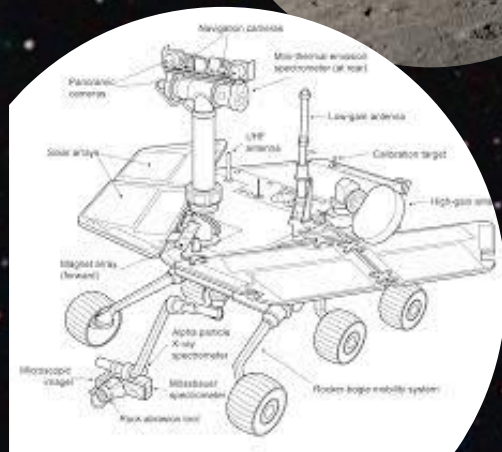
Could you try to design (on paper) and possibly even make or build an innovative model rover, which could map the surface of the moon or

mars? http://www.esa.int/kids/en/learn/Technology/Spacecraft/Building_a_spacecraft

• What might this need? What might you need you to consider? Are you familiar with these varying surfaces and the conditions?

• <https://mars.nasa.gov/participate/funzone/>

• Consider how you can communicate the parts of this moon buggy or mars rover and evaluate how this may need to be changed based upon your research.



We are learning to use PE skills....

In PE we are learning about dance and engaging in a broad range of physical activities. We learn to perform dances using simple movement and patterns. We also learn to develop flexibility, strength, technique, control and balance using movement patterns.



• Could you make and perform a dance like walking or moving on the moon? What might this feel like? What problems might you face? Have you considered moving in your spacesuit? Try and look up Mike Fincke's dance in space too!



• Listen to this music, what do you hear? Can you perform a sequence of movements that link to this [music](#)

We are learning to use physical education skills...



- To build further strength, can you invent a training plan to build up your fitness ready to explore on a trip to the Moon? Consider how you will be unbalanced in space; how might this effect your fitness plan and regime?
- Can you evaluate these by asking family to take part too? Can they follow your workout regime and watch and evaluate your dance linked to the [music](#)?

