

English Challenges

- Visit the website and look carefully at the picture *Rocket on the Moon*.

https://www.onceuponapicture.co.uk/portfolio_page/rocket-on-the-moon/



Take on the role of a detective and look for clues in the picture to practise your inference skills when answering the questions.

- Imagine you are an astronaut travelling through Space. Write an account of your journey and experience.
- Remember to keep reading using Bug Club.



Mathematics Challenges

- The International Space Station orbits approximately 408km over Earth. Use the information that 8km = 5 miles to convert this into miles.
- The table below shows the distance of the planets from the Sun. Put these in order starting with the closest to the sun. 1 billion = 1000 million.
- Can you write the numbers in digits?

| Planet | Distance from sun in Km |
|---------|-------------------------|
| Jupiter | 778.3 million |
| Venus | 108.2 million |
| Saturn | 1,427.0 million |
| Mars | 227.9 million |
| Neptune | 4.4971 billion |
| Mercury | 57.9 million |
| Uranus | 2.871 billion |
| Earth | 149.6 million |

- Check out daily Maths lessons on <https://whiterosemaths.com/home-learning/year-6/> These have videos which teach you and questions for you to do.
- Remember to log onto TT Rockstars and Mathletics to practise your skills.

History Challenge

History was made on Saturday 30th May 2020 when the **private rocket** company SpaceX sent two Nasa astronauts into orbit.



It is the first time since the retirement of the shuttles nine years ago that an American crew has made the journey from US territory.

Doug Hurley and Bob Behnken are not only trialling a new capsule system, they are also initiating a new business model for Nasa.

The agency will no longer own the vehicles it uses but merely purchase the "taxi" service offered by SpaceX.

What does "**private rocket**" mean? Why is this a significant event for space travel and a significant historical event? What impact may this have for future space travel? Write down your answers.

Science Challenges

- Describe how the Earth and other planets move relative to the sun.
- Describe how the Moon moves relative to the Earth.
- Explain how shadows change over the day.
- Does the sun actually move during the day?



Art & Design Challenge



Create your own piece of artwork of the solar system, the moon or the sun. Use media of your choice.

Geography Challenge

The Moon's **surface** is home to **mountains**, huge **craters** and flat **planes** called '**seas**' made of hardened **lava**.



- Explain the words in red within this context:
- Why is the word "seas" in inverted commas?

ICT Challenges

All computer games come from a basic idea that is then developed into a game.

One of the earliest computer games was called Pong. Pong simply allowed you to play a game of table tennis on a computer. It was very popular from the moment it was launched.

So the first thing to do is come up with the idea for your game. You could start with a pirate looking for lost treasure, a vet caring for animals on a safari park or a spaceship captain exploring an alien galaxy.



When you are coming up with your idea you can ask yourself questions. For example, what is the **objective**? What are the **rules**?

Once you have your idea and have decided on a genre you can start designing your game.

Cultural Capital Challenge

Watch the SpaceX launch and create a 3-2-1;

<https://www.bbc.co.uk/news/topics/c5y915pwp89t/spacex>

- 3 questions you would ask an astronaut
- 2 facts about the mission
- 1 reason the SpaceX was launched

Creative Challenge

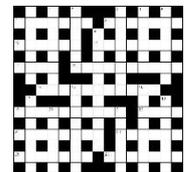
- Make a model of the solar system with the sun in the centre.
- Can you remember the order of the planets in terms of the distance from the sun, starting with the closest? Use the information in the table in the Maths section and the table below to help you with your creation.



| Planet | Diameter (km) |
|---------|---------------|
| Mercury | 4879.4 |
| Mars | 6779 |
| Venus | 12104 |
| Earth | 12756 |
| Neptune | 49528 |
| Uranus | 51118 |
| Saturn | 120660 |
| Jupiter | 142800 |

General Knowledge Challenge

- Make a crossword creating clues about space. Make sure it has at least 20 clues and you could get someone else to complete it.
- Alternatively create a Kahoot quiz, if you have access to the internet.
- Log in with



Username: **OPPAStudent** Password **OysterY6**

