

### Science Summer 1 Week 3

#### Space Project 2: The Moon

This week you are going to be finding out all about the Moon. You will be completing a session on the phases of the Moon first and then you will choose one activity from the activity grid for the final two sessions.

You should aim to spend around 1 hour on each of the sessions for this week's project. You have one week to complete it. If you have time, you could try and complete more than two of the activities.

#### Session 2 and 3

For each of these sessions you are going to choose one (or more if you like) of the activities in the table below to complete.

Find out more about how the Moon affects the sea. Watch the video at <a href="https://www.bbc.co.uk/teach/class-clips-video/little-stargazing-the-moon-and-the-sea/zb7tf4j">https://www.bbc.co.uk/teach/class-clips-video/little-stargazing-the-moon-and-the-sea/zb7tf4j</a> and then choose how to present what you have learnt.	Create a paper mache model of the Moon. Think carefully about the texture of the Moon's surface- it is not smooth!	Create a picture of the Moon in a medium of your choice. Can you make your picture show clearly the texture of the Moon's surface?	Create a non-chronological text (information page) about the Moon. You could use your learning from session 1 as well as your own research/ knowledge.	Crater experiment using the information below.
Maths challenge using the instructions below.	Find out more about the first Moon landing. You could use <a href="https://www.penguin.co.uk/articles/children/2019/jul/facts-about-moon-landing-space-race-apollo-11.html">https://www.penguin.co.uk/articles/children/2019/jul/facts-about-moon-landing-space-race-apollo-11.html</a> . Then write a newspaper article about the event.	Creative Writing Imagine you are living on the Moon. Write a diary entry about one of your days. Remember there is less gravity!	Can you believe that some people think the Moon is made of cheese? Write a persuasive letter to convince them they are incorrect. Think about how we know.	Some astronauts have been lucky enough to land on the Moon. Write a recount of their journey to the Moon. You will probably need to research this before you write!

### Crater Experiment

The craters on the Moon are caused by objects such as asteroids hitting the surface. Conduct an experiment to identify how a crater's shape or size is affected by either the shape of the object hitting the surface, the height the object is dropped from or the object's weight. Remember to choose one thing to investigate, make sure you carry out a fair test and think carefully before you start about how you will record your results.

There are many websites that could help you to plan this experiment. However, we suggest using a container with something that will change when you drop your object into it such as flour, sand or Playdoh. Make sure your material is spread in a thick layer (1-2cm deep) so you can clearly see the impact of the object.

### Maths Challenge

At the start of Year 5, we found that the weight of an object is affected by the amount of gravity. As the Moon is smaller than the Earth, we know it will have less gravity which means that objects will be lighter.

Your challenge is to convert the weight of things you have in your house from the Earth weight to their Moon weight. The Moon's gravity is one sixth of Earth's gravity so to find the weight of an object on the Moon you divide its weight on Earth by 6. Try using the formal method for division to do this if you can and use a calculator to check your answers.

**Challenge:** Can you find objects that would be the same weight if one was on the Moon and the other was on Earth - feel what the difference would be.

For example: a can of lemonade on Earth would weigh the same as a large bag of flour on the Moon.