

Science.

- Name the eight planets and classify them as jovian (gaseous) or terrestrial (rocky).
- Explore the size and scale of the Solar System. Measure out to the distance between the planets to scale ([Links to cross curricular Numeracy](#)).
- Represent the day and night cycle and explore the movement of Earth on an axis.
- Describe the orbit cycle of the moon and its phases.
- Investigate the force of gravity on different objects and measure using force meters. Hypothesise if weight affects the speed in which objects drop and test this with objects such as grapes and oranges.
- Explore how and why craters are formed on the moon and reasons why some planets have more than others.
- Measure and record the weight of the children in Newtons and explore how this would change if they were to visit other planets in the Solar System, including the Moon. [Links to cross curricular Numeracy](#)).
- Use digital thermometers to measure temperature and test how water could be kept cool on Mars and hot on Neptune. Explore how insulation affects the rate of a liquid cooling.
- Identify geographical features of the Earth, such as countries, continents, volcanoes, rivers and impact craters.

History

- Explore the work of Galileo Galilei, the father of modern observational astronomy.
- Explore how Sir Isaac Newton described the concept of gravity and retell in a dramatic performance.

Geography

- Program movable toys to negotiate the terrain of the moon avoiding obstacles and deep craters.

Art and Design

- Explore block printing in order to create a lunar chart based on the phases of the moon.

Memorable experience.

The children will explore the Stardome as it visits school and listen to Greek creation myths linked to the star constellations. What do the children already know and what are they eager to discover on their journey through the stars?
We will also visit the National Space Centre.



Journey through space, the final frontier...Navigate beyond the Sun, the magnificent, blazing star at the centre of our Solar System! Investigate the eight planets – Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Take a look at the Moon, a celestial body that orbits Earth.

Programme a 'rover' to traverse a lunar landscape and work scientifically to investigate gravity...and what happens when there is none! Compare the time of day at different places on the Earth and use GPS satellite navigation systems to track hidden treasure! Get in a spin, making simple models of the solar system and listen to the haunting sounds of space themed songs. Then it's three, two one...BLAST OFF! Build and launch a rocket for an important test mission. Exploring space is the greatest adventure that humankind has ever undertaken! Are we alone or is there another life form out there?

Innovate!

Your mission, if you choose to accept it, is to design a rocket for the UK Space Agency. Your rocket will be tested for robustness, aesthetics and height or distance travelled alongside other models, so your test missions are crucial. Make sure you record your data accurately so that you can use it as evidence in your presentation to the UK Space Agency,

Literacy

- Use a variety of sources to discover information about the Solar System, resulting in an information leaflet on the Solar System including a Mnemonic.
- Read, discuss and create Moon inspired myths and legends – drafting ideas for real or imaginary phenomenon such as how the man in the moon got to be there. Refine drafts resulting in a detailed myth including illustrations.
- Free verse poetry – create a poem about gravity and the effect it has. Explore powerful vocabulary and practice reading these aloud with expression and intonation. Create raps and record them using Audacity ([Links with computing](#)).
- Create a newspaper report on the first moon landing after using a variety of sources, including TV footage from the broadcast in 1969. Sequence events from the moon landing and create a report about the first moon landing. Explore how to include quotes and graphic headlines to the report. ([Links with computing](#)).
- Create a graphic novel with an alien character designed by the children.
- FOCUS TEXT(S) – Bob the Man on the Moon

Computing

- Use stop frame animation to create a short fantasy film about an alien. Plan out a story board and create simple props, scenery and characters. Add a soundtrack!

DT

- Explore texture, shape and colour to recreate the surface of the moon from close up imagery. Use stitching techniques to layer up different textiles.
- Design and make a satellite, rover or shuttle for a mission.

Music

- Listen to space themed music such as Rocket Man and Major Tom. Analyse the lyrics to work out the story behind the song. Discuss how this gives us information about the Space Race.