



**Year group:** Year 4

**Term:** Autumn 1

**Project title:** Bang Goes the Theory!

**Project and Exhibition:** Mars Rovers

**Project synopsis:**

We will be exploring the theory: Is there life on Mars?

**Curriculum opportunities:**

**English:** We will be studying the book, 'Moon Man' in which we will be writing diary entries and letters, as well as having a class debate about 'outsiders' and how we should treat them.

**Maths:** We will be looking at 'Number' in a lot of detail and understanding the size of numbers. We will be linking this with our work on planets when we look at their distance from the sun and their size in relation to things that we understand and can comprehend.

**Science:** Throughout this term, we will be looking at Space, mainly planets and their properties. We will also look at some famous astronauts such as Neil Armstrong and Tim Peak.

**Creative arts/Humanities:** We will be designing and building our own Mars Rovers – creating and decorating a shell for the buggies. We will investigate what shapes work best for the buggies and why.

**STEM:** For our Mars Rovers, we will be using Coding to program the buggy so that it can be driven. The finished product will be like a remote control car.

**Outdoor Learning:** We will be looking at distances outside and relating them to the distance of planets from the sun. We will also look at times of day and where the sun is in the sky to link with Earth's rotation and why we have day and night.

**Engagement Activity:**

A trip to Jodrell Bank will get the children excited about the topic and help them with their Mars Rovers ideas.

**Communicating learning:**

At the end of the topic, we will showcase our Mars Rovers across other year groups.

**Key Vocabulary:**

Planets, solar system, atmosphere, orbit, gravity, meteor, stars, satellite, constellations, milky way, galaxy.

**Project outcomes:**

The project will involve children using a range of engineering and DT skills, Science knowledge about Space and peer learning and critique to create Mars Rovers.

**How you can help:**

Carry out some research into Space at home and take them out when it's dark to look at the night sky.