# **Key Question**

# What is out there?

## **Synopsis**

During terms 3 and 4 pupils will be working towards designing their own planet. They will have to consider the physical geography of the planet and how we might survive on this new planet.

In order to do this, pupils will learn about the solar system. They will focus on Mars and compare its physical geography to that of Earth. They will also consider nutrition and space food and how astronauts survive in space.

> LAUNCH Star gazing.

#### Science:

#### **Term 3: Forces and magnets.**

compare how things move on different surfaces **\*** notice that some forces need contact between two objects, but magnetic forces can act at a distance \* observe how magnets attract or repel each other and attract some materials and not others compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials \* describe magnets as having two poles \* predict whether two magnets will attract or repel each other, depending on which poles are facing.

#### **Term 4: Nutrition**

identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

### **MILESTONE 2/Advancing**

What are the similarities and differences between Earth and Mars?

#### MILESTONE 1/Basic

What is the solar system?

What are the names of the planets in our solar system? Where are we in the solar system? to improve their mastery of art and design echniques, including drawing, painting and

culpture with a range of materials.

#### Who is Tim Peake?

se search technologies effectively, appreciate now results are selected and ranked, and be discerning in evaluating digital content

#### What is the role of an astronaut?

## What is the physical geography of planet Earth?

describe and understand key aspects of: physical geography, including: climate zones, niomes and vegetation belts, rivers, mountains, volcanoes and earthquakes

#### What do we know about the physical geography of Mars?

describe and understand key aspects of: physical geography, including: climate zones, niomes and vegetation belts, rivers, mountains, volcanoes and earthquakes

What are the similarities between Earth and Mars?

Physical geography: volcano study

#### What are the differences between Earth and Mars?

# YEAR 3 and 4 PROJECT MAPPING

#### **MILESTONE 3/Deep**

How might we survive on a new planet?

## What do we need to survive on a planet?

*Identify that animals, including humans,* need the right types and amount of nutrition, and that they cannot make their own food; hey get nutrition from what they eat

## What might our homes be like on the new planet?

Use research and develop design criteria to nform the design of innovative, functional, ppealing products that are fit for purpose, timed at particular individuals or groups.

Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and omputer-aided design

## What laws would we need on the planet?

Why and how rules and laws are made and enforced, why different rules are needed in different situations and how to take part in naking and changing rules.

# Outcome.

To design a new planet for humans to inhabit.

## Audience

Parents and children Longney Primary School

# Creativity

Create planets within the solar system using fruit.

Make diagrams and pictures of their own planet.

Create a Scratch space quiz or animation.

Create a clay structure of Mars.

## **PSHE and P4C**

Health & wellbeing - developing risk management, understanding personal change and responsibility.

Understanding and creating laws/rules.