#### YEAR 5/6 SPRING 1 CYCLE 2 EARTH, MOON AND SPACE



We will be rocket launching ourselves into this topic, exploring what stars are, what is special about each planet, how moon phases work and which scientists led us to our current understanding of space.

## SCIENCE

- To create own versions of models
- To use simple models to describe scientific ideas
- To explain the effect of gravity on an object
- To name, order and know key facts about planets in the solar system and how they relate to each other in size and features
- To explain day, night, shadows, phases of moon and seasons using appropriate vocabulary
- To know that a star is a glowing ball of gas and that these are grouped in constellations
- To understand the basic concept of the big bang and where the universe comes from
- To recognise that living things have changed over time
- To understand that fossils provide information about living things that inhabited the Earth millions of years ago.
- To understand that adaptation can lead to evolution

# GEOGRAPHY

- To know why energy sources are important
- To understand the benefits and drawbacks of different energy sources
- To understand how energy is generated in the United States.
- To know how energy sources are distributed in an area.
- To explain reasons for choosing an energy source.
- To collect and present data on where to position a solar panel on the school grounds.



# COMPUTING

#### Year 5

- To control a simple circuit connected to a computer
- To write a program that includes count-controlled loops
- To explain that a loop can stop when a condition is met
- To explain that a loop can be used to repeatedly check whether a condition has been met
- To design a physical project that includes selection
- To create a program that controls a physical computing project

### Year 6

- To define a 'variable' as something that is changeable
- To explain why a variable is used in a program
- To choose how to improve a game by using variables
- To design a project that builds on a given example
- To use my design to create a project
- To evaluate my project

### PE

Year 5:

- To swim competently, confidently and proficiently over a distance of at least 25 metres.
- To use a range of strokes effectively [for example, front crawl, backstroke and breaststroke].
- To perform safe self-rescue in different water-based situations.

Year 6:

- Compose individual, partner and group dances that reflect the chosen dance style. Perform with confidence, using a range of movement patterns.
- Move appropriately and with the required style in relation to the stimulus, e.g. using various levels, ways of travelling.
- Move rhythmically and accurately in dance sequences. Improvise with confidence, still demonstrating fluency across their sequence. Dance with fluency and control, linking all movements and ensuring that transitions flow.