

## Spring 2017- Space

<u>Main Learning Objectives</u>	<u>Main Learning Objectives</u>
<p><b><u>SCIENCE - Spring 1</u></b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>• identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>• recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> </ul>	<p><b><u>SCIENCE-Spring 2</u></b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• describe the movement of the Earth, and other planets, relative to the Sun in the solar system</li> <li>• describe the movement of the Moon relative to the Earth describe the Sun, Earth and Moon as approximately spherical bodies use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>
<p><b><u>HISTORY</u></b></p> <ul style="list-style-type: none"> <li>• The Space Race – the Cold War, the race to the moon, moon landing, ISS</li> </ul>	<p><b><u>GEOGRAPHY</u></b></p> <ul style="list-style-type: none"> <li>• identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)</li> </ul>
<p><b><u>MUSIC</u></b></p> <ul style="list-style-type: none"> <li>• improvise and compose music for a range of purposes using the inter-related dimensions of music</li> <li>• listen with attention to detail and recall sounds with increasing aural memory</li> <li>• use and understand staff and other musical notations</li> </ul>	<p><b><u>RE</u></b> Suffering Why does God allow people to suffer? Who has suffered? How does that affect them? Suffering at Easter (the Crucifixion)</p>
<p><b><u>COMPUTING - Spring 1</u></b> Graphic Modelling</p> <ul style="list-style-type: none"> <li>• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> </ul>	<p><b><u>COMPUTING -Spring 2</u></b> Presentation</p> <ul style="list-style-type: none"> <li>• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>

## DESIGN TECHNOLOGY

### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed 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 computer-aided design

### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

## ART & DESIGN

### Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history

## PE. - HOCKEY, BADMINTON, CROSS COUNTRY, DANCE and GYM

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- perform dances using a range of movement patterns

## SWIMMING AND WATER SAFETY

Pupils should be taught to:

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