

### Geography

Can I use ariel mapping to **discover** key land marks?  
Can I use aerial mapping to **identify** physical and human features?

### History

Can I **summarise** the events of the first moon landing?  
Can I **order** key events in space on a timeline?

### The Arts

Can I **discuss** the work of Peter Thorpe?  
Can I **plan and produce** my own space painting in the style of Peter Thorpe?

### Science

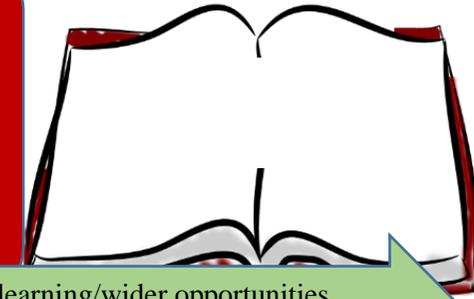
Can I **identify** different types of forces?  
Can I **understand** the force of gravity and what effect it has?  
Can I **explain** the difference between mass and weight?  
Can I **investigate** forces that act between moving surfaces?  
Can I **apply** my understanding of irreversible changes to set off a rocket?

### Computing

Can I **develop** an appreciation of the links between geometry and art?  
Can I **develop** an understanding of turtle graphics?  
Can I **experiment** with the tools available, refining and developing my work?  
Can I **explore** computer-generated art, in particular fractal-based landscapes?

### Skills

Can I accurately **measure** the materials for a rocket?  
Can I **compare** the distance my rocket travels in comparison to another's?  
Can I **explain** gravity and its importance?  
Can I **convince** you that men did land on the moon?



Extended learning/wider opportunities

Can I discover any conspiracy theories?

Can I research who first theorised gravity?

Hook  
Jodrell bank

## Did they really land on the moon?

Can I **evaluate** the importance of the moon landing?  
Can I **explain** the importance of forces and the effect  
Children's experiences and local context  
Can I **evaluate** the importance of forces in space?

### D&T

Can I **identify** a design criteria for a rocket?  
Can I **recommend** and **communicate** models?  
Can I **plan** an innovative model?  
Can **gather** appropriate materials to build my rocket  
Can I **build** a rocket?

## SMSC

Core theme: Health and Wellbeing

Can I explore the diet and lifestyle of an astronaut and compare it to my own?

Can I discuss what it means to belong to a faith?

Can I identify what it means to be a Muslim today?

Can I compare the lives of people from different religions?

## Year 5 Spring 1- coverage

### Science

#### Earth and Space

Pupils should be taught to:

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces

#### Art and design

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and 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.

### Computing

We are web developers

Pupils should be taught to:

- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- 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.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

### D&T

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

#### **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
- understand how key events and individuals in design and technology have helped shape the world

### **Technical knowledge**

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

## Geography

### Locational knowledge

- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time

### Human and physical geography

describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

### Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

## History

Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.

Pupils should be taught about:

- a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

## **Music**

Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

Pupils should be taught to:

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music.