Year 3
Autumn 1

Science: Forces and Magnets
- Compare how things move on different surfaces
- Notice that some forces need contact between objects, but magnetic forces can act at a distance
- Observe how magnets attract and 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

History: Stone Age
Pupils should be taught about:
- Late Neolithic hunter-gatherers and early farmers e.g. Skara Brae
- Bronze Age religion, technology and travel e.g. Stonehenge

Iron Age hill forts: tribal kingdoms, farming, art and culture

Art: Investigating Patterns
- To improve their mastery of art techniques, including drawing, painting with a range of materials [for example, pencil, charcoal, paint]
- To create sketch books to record their observations

Music: Ballads
- 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
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Computing: Connecting computers
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- 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
- 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

Year 3
Autumn 2

Science: Light and Shadow
- Recognise that we need light in order to see things and that dark is an absence of light
- Notice that light is reflected from surfaces
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Recognise that shadows are formed when the light from a light source is blocked by an opaque object. Find patterns in the way that the size of shadows changes

Geography: The Exceptional Artic
- Use latitude and longitude to locate the global position of the Artic
- Use maps and atlases and digital mapping to record geographical features
- Locate the artic and N and S pole
- Locate physical and human features using 4 figure grid references (using OS maps)
Understand geographical similarities and differences through the study of human and physical geography of the artic

DT: Photograph frames
- 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 group
- 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 their ideas and products against their own design criteria and consider the views of others to improve their work
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures

Music: Creating compositions in response to animation
- 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
- 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

Computing: Stop-frame animation
- 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

Year 3
Spring 1

Science: Animals including humans

Pupils should be taught to:

- 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
- Identify that humans have skeletons and muscles for support; protection and movement (Focus on the similarities and differences of the skeletons of early man compared to modern man)

Geography – Volcanoes

- Physical geography, including: climate zones, biomes and vegetation belts, volcanoes and earthquakes (water cycle)
- Use maps, atlases, globes and digital computer mapping to locate countries and describe features studied
- The physical geography of two earthquake and volcanic regions (Mount St, Helen's and Mount Etna/Mount Vesuvius, historic eruption of Pompeii – what are the causes and effects of earthquakes and volcanoes?)
- The human geography relating to the impact of living in an earthquake and volcanic region. (Explore the ways people protect themselves from earthquakes and volcanoes)

DT: Sandwich Snacks

- 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

Music: Developing singing technique and keeping in time

- 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

Computing: Sequencing sounds

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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

Year 3
Spring 2

Science: Rocks
- Compare and group together different kinds of rocks on the basis of the appearance and simple physical properties. (Texture, colour, density and type, permeable, impermeable igneous, sedimentary, metamorphic rocks etc.)
- Describe in simple terms how fossils are formed when things that have lived are trapped within a rock. (fossils and Sedimentary rocks)
- Recognise that soils are made from rocks and organic matter (Humus layer, soil layer & bedrock, chalk, limestone mineral and nutrients, alkaline and acid soils etc.)

History: The Romans
The Roman Empire and its impact on Britain
- Julius Caesar's attempted invasion in 55-54 BC
- The Roman Empire by AD 42 and the power of its army
- Successful invasion by Claudius and conquest, including Hadrian's Wall
- British Resistance, e.g. Boudica (Queen of the Celts)
- 'Romanisation' of Britain: sites such as Crofton Roman Villa and its impact of technology, culture and beliefs including early Christianity

DT: Moving monsters
- Evaluate and analyse creative works using the language of craft and design
- Know about great craft makers and designers, and understand the historical and cultural development of their art forms
- To investigate techniques for making simple pneumatic systems
- To be able to investigate ideas for creating moving monsters

Music: Pentatonic melodies and composition
- 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

Computing: Branching databases
- 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

Year 3
Summer 1

Science: Plants
Pupils should be taught to:
- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, & room to grow) & how they vary from plant to plant
- Investigate the way in which water is transported within plants

Explore the part that flowers play in the life cycle of a flowering plant, including pollination, seed formation and seed dispersal

Geography: Amazon Rainforest (Brazil)
Pupils should be taught to:
- Locate Brazil and the Amazon Rainforest on a world map and on a map of Brazil
- Identify the position of the Amazon Rainforest and cities of Brazil using latitude and longitude and relative location of Equator, tropics of Cancer and Capricorn
- Understand the geographical similarities and differences through the study of human and physical geography of the Amazon Rainforest

Use a range of digital and aerial images to locate countries and describe key features

Art: Plant Art
Pupils should be taught to:
- Create sketch books to record their observations
- Use sketchbooks to review and revisit ideas
- Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials

Learn about great artists in history

Music: Jazz
- 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

Computing: Desktop publishing
- 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

Year 3 Summer 2

Science: Plants

Pupils should be taught to use the following practical scientific methods, processes and skills:

- Asking simple questions and recognising that they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions and gathering and recording data to help in answering questions

History: Local History

- An in depth study linked to one of the British areas of study listed above
- A study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066)
- A study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality

Art: Famous Buildings

- To learn about great artists (The Basket of Apples and Still Life with Red Onions by Cezanne)
- 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]

Music: Traditional instruments and improvisation

- 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

Computing: Events and actions in programs

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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