

## Long Term Overview - Year 3

	Science	Geography	History	Art/DT	Computing
<p>AUT 1</p> <p>Scrumdiddlyumptious</p> <p>Foci: Science &amp; DT</p>	<p>Record their findings using scientific language and present in note form, writing frames, diagrams, tables and charts. Gather, record, classify and present data in a variety of ways to help in answering questions</p> <p>Identify the different food groups and design a healthy meal based on these food groups. 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.</p> <p>Make decisions about what to observe during an investigation. Identify differences, similarities or changes related to simple scientific ideas and processes.</p>	<p>Locate geographical features on a map or atlas using symbols shown in a key. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p> <p>Describe and compare different features of human and physical geography of a place, offering explanations for the locations for some of these features.</p> <p>Describe and understand key aspects of 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.</p>		<p><b>ART</b> - Use line to add surface detail to a drawing, print or painting. Create sketch books to record their observations and use them to review and revisit ideas. Make suggestions for ways to adopt/improve their artwork. Improve their mastery of art and design techniques, such as drawing, painting and sculpture with materials (e.g. pencil, charcoal, paint, clay)</p> <p><b>D&amp;T</b> - Investigate the design features (including identifying components or ingredients) of familiar existing products. Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose. Suggest improvements to products made and describe how to implement them (take views of others into account). 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. Combine a variety of ingredients using a range of cooking techniques to prepare and cook a variety of predominately savoury dishes. Select the appropriate tools and explain choices. Select from and use a wide range of materials and components according to their functions properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	

Aut 2

## Triabl Tales

Foci: **History**

Order pictures showing the stages in the life cycle of a plant.

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

Explain that when a light source is blocked a shadow is formed.

Recognise that shadows are formed when the light from a light source is blocked by a solid object.

Use ideas to pose questions, independently, about the world around them.

Ask relevant questions and using different types of scientific enquiries to answer them.

Record their findings using scientific language and present in note form, writing frames, diagrams, tables and charts.

**Observe**, measure and record the human and physical features in the local area responding to a range of geographical questions

**Use** fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

**Compare** and contrast aerial photographs and plan perspectives explaining their similarities and differences.

**Describe** and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

**Identify** how people both damage and improve the environment.

**Describe** and understand key aspects of 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.

**Locate** appropriate information needed for a task from a source material.

**Use** maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

**Show** developing understanding of chronology, by beginning to realise that the past can be divided into different periods of time.

**Learn** about changes in Britain from the Stone Age to the Iron Age

**Choose** the most important source material for a task, showing awareness of a range of sources.

**Suggest** useful research questions.

**Describe** some of the main changes in Britain, resulting from an event.

**Express** an opinion on whether a person or event had a positive or negative impact on life in Britain.

**Use** labelled diagrams, recounts, stories, diaries and pictures to illustrate understanding about historical events and famous people.

**Use** appropriate historical vocabulary to describe key features of a time period.

### **Art & Design**

**Use** a range of artistic vocabulary to compare artworks of a particular genre or movement

**Find** out about great artists, architects and designers in history.

**Imprint** a range of patterns into modelling materials such as clay, dough and papier-mâché.

**Improve** their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [e.g. pencil, charcoal, paint, clay]

**Identify** interesting aspects of objects as a starting point for work.

### **DT**

**Share** ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose.

**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.

**Plan** which materials will be needed for a task and explain why.

**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.

**Suggest** improvements to products made and describe how to implement them (taking the views of others into account).

**Evaluate** their ideas and products against their own design criteria and consider the views of others to improve their work.

SPR 1

## Mighty Metals

Foci: **Science**

**Describe** forces in action (pulling and pushing) and whether the force requires direct contact between objects or whether the force can act at a distance (magnetic force). **Notice** that some forces need contact between two objects, but magnetic forces can act at a distance. **Compare** how an object moves over surfaces made from different materials, making predictions and measuring the distance travelled. **Make** predictions, explaining thinking, then test a range of magnets for their strength and polarity. **Predict** whether two magnets will attract or repel each other, depending on which poles are facing. Observe how magnets attract or repel each other and attract some materials and not others. Explain the terms 'magnetic attraction' and 'repulsion' and 'magnetic poles', using a model for assistance. **Describe** magnets as having two poles. **Make** systematic and careful observations, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. **Discuss** (methods) and Set up simple practical enquires, comparative and fair tests. Sort and group materials into those that are magnetic and those that are not and identify patterns within the groups. **Identify** differences, similarities or changes related to simple scientific ideas and processes. **Record** findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables **Draw**, *with help*, a simple conclusion based on evidence from an enquiry or observation. **Use** straightforward scientific evidence to answer questions or to support their findings.

**Art** - **Improve** their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay).

**DT 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. **Plan** which materials will be needed for a task and explain why. **Select** the appropriate tools and explain choices, select and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. **Select** from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing), accurately **Share** ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose. **Explain** the purpose of a given task and identify the ideal materials and tools for the job. **Suggest** improvements to products made and describe how to implement them (taking the views of others into account). **Evaluate** their ideas and products against their own design criteria and consider the views of others to improve their work.

**Understand** how to select information to put into a data table.

**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.

**Recognise** which information is suitable for their topic.

SPR 2

## Gods and Mortals

Foci: **History**

**Draw** sketch maps and plans using agreed symbols for a key.  
**Use** maps, atlases, globes and digital/computer mapping to locate countries and describe features studied  
**Describe** and compare different features of human and physical geography of a place, offering explanations for the locations for some of these features.  
**Describe** and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.

**Use** appropriate historical vocabulary to describe key features of the time period.

**Learn** about Ancient Greece - a study of Greek life and achievements and their influence on the western world.

**Show** developing understanding of chronology by beginning to realise that the past can be divided into different periods of time.

**Choose** the most important source material for a task, showing awareness of a range of sources.

**Explain** how a significant figure of the period influenced change.

**Use** labelled diagrams, recounts, stories, diaries and pictures to illustrate understanding about historical events and famous people.

### **Art**

**Use** a range of modelling materials and tools, choosing the one most appropriate to a given task.

**Improve** their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay).

**Use** a range of artistic vocabulary to compare artworks of a particular genre or movement.

**Find** out about great artists, architects and designers in history

### **DT**

**Make** realistic plans identifying processes, equipment and materials needed.

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

**Plan** which materials will be needed for a task and explain why.

**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.

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

**Recognise** which information is suitable for their topic.

**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.

## SUM 1

### Flow

#### Foci: *Geography*

Using maps, fieldwork, water cycle.

**Learn** to work scientifically and look at soil and aquatic plants.

**Compare** in detail a range of rock or soil samples from the locality, using simple tables and diagrams to present their findings.

**Recognise** that soils are made from rocks and organic matter.

**Record** their findings using scientific language and present in note form, writing frames, diagrams, tables and charts.

**Report** on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

**Gather**, record, classify, present and use data in a variety of ways to help answer simple questions.

**Compare** and describe how requirements for growth vary from plant to plant and how this relates to a plant's environment, such as with climbing and alpine plants.

**Explore** the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.

**Draw**, with help, a simple conclusion based on evidence from an enquiry or observation.

**Use** results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

**Human** and physical features; Rivers of the world; Counties and cities of the UK.

**Use** the eight points of a compass, four and six figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the UK and the wider world. And describe the location of a country or geographical feature.

**Observe**, measure and record the human and physical features in the local area responding to a range of geographical questions.

**Use** fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

**Use** technical and geographical vocabulary to describe geographical processes. **Describe** and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes, earthquakes and the water cycle.

**Make** comparisons of the same geographical feature in different counties.

**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).

**Locate** geographical features on a map or atlas using symbols shown in a key.

**Locate** the world's countries using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities.

**Identify** how people both damage and improve the environment

**Describe** and understand key aspects of 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.

**Describe** and compare different features of human and physical geography of a place, offering explanations for the locations for some of these features.

**Name** and locate counties and cities of the UK and geographical regions, 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.

**Use** technical and geological vocabulary to describe geographical processes.

### Art

**Copy** and create patterns and textures with a range of paints

**Improve** their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [e.g. pencil, charcoal, paint, clay].

### DT

**Look** at mechanical systems; structures painting.

**Create** and use simple gears, pulleys, cams, levers and linkages.

**Understand** and use mechanical systems in their products [e.g. gears, pulleys, cams, levers and linkages].

**Create** a shell or frame structure using diagonal struts to strengthen.

**Apply** their understanding of how to strengthen, stiffen and reinforce more complex structures.

**Online** research and communication  
Become discerning in evaluating digital content

**Use** search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

**Recognise** which information is suitable for their topic.

**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.

## SUM 2

### Predator

#### *Foci: Science*

Food chains; Fossils; Plant parts and functions; Water transportation in plants; Skeletal systems; Working scientifically.

**Gather**, record, use, classify and present data in a variety of ways to answer a simple question. **Compare** the diets of a herbivore and carnivore with (typically) omnivorous humans. **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. **Define** what a fossil is and how they are formed. **Describe** in simple terms how fossils are formed when things that have lived are trapped within rock. **Identify** and describe the functions of different parts of flowering (common) plants: roots, stem/trunk, leaves and flowers. **Investigate** the way in which water is transported within plants. **Draw** a simple diagram to show how water is transported through a plant. **Describe** how the skeleton and muscles work together to support, protect and assist movement. **Identify** that humans and some other animals have skeletons and muscles for support, protection and movement. **Know** that animals, including humans, cannot make their own food, by investigating food chains and recognise that all food begins with a plant. **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. **Draw**, with help, a simple conclusion based on evidence from an enquiry or observation. **Report** on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Record** their findings using scientific language and present in note form, writing frames, diagrams, tables and charts.

**Fieldwork**; Using maps to locate countries and continents.

**Use** fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

**Observe**, measure and record the human and physical features in the local area responding to a range of geographical questions.

**Locate** geographical features on a map or atlas using symbols shown in a key.

**Use** maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

#### **Art**

Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [e.g. pencil, charcoal, paint, clay].

#### **DT**

**Make** 3-D scale models, selecting and using materials (collage and textiles).

**Identify** interesting aspects of objects as a starting point for work.

**Plan** which materials will be needed for a task and explain why.

**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.

Algorithms; Flow diagrams; Online research; Using logical reasoning, graphics software, digital presentations. Use sequence, selection and repetition 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** software or search engines effectively. **Recognise** which information is suitable for their topic. **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** software or search engines effectively. **Use** search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. **Use** logical reasoning to explain how a simple algorithm works. **Use** logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

<p><b>Longitudinal Study</b></p> <p><b>Ongoing learning</b></p>	<p>Adopt a Tree Study Identify and name trees and study their growth and changes throughout a year. Observe the changes through seasons.</p>				
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We have used the Cornerstone curriculum checker, the cornerstone gap analysis and the National Curriculum to ensure correct coverage.

Each half term we will focus on two main areas with Art/DT and science running alongside other areas for most of the year.