English genres to be covered

Woodpeckers / Kingfishers **Cycle A- Term 1** **Mayans**	**Woodpeckers / Kingfishers** **Cycle A- Term 2** **Invaders and Settlers (Vikings)**	**Woodpeckers / Kingfishers** **Cycle A- Term 3** **Tudor Explorers**
Instructions (eg making chocolate / making an instrument – sound: science link) **Narrative: Adventure** ***Recount*** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • ***Reports*** • *Newspaper*	**Narrative – Myths, Legends and/or Fables** (eg Beowulf by Michael Morpugo) **Persuasive text** (eg pollution & ruining habitats / animals in captivity: some for and some against – science link) ***Recount*** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • *Reports* • *Newspaper*	**Poetry** – cinquain, tanka, haiku **Information Texts** ***Recount*** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • *Reports* • *Newspaper*
Woodpeckers / Kingfishers **Cycle B Term 1** **Stone Age to Bronze Age**	**Woodpeckers / Kingfishers** **Cycle B Term 2** **Romans**	**Woodpeckers / Kingfishers** **Cycle B Term 3** **Ancient Egyptians**
Play scripts and dialogue (eg link to light and shadow puppets or pantomime) **Narrative - Traditional Tales/Fairy Tales** (link to school pantomime trip) ***Recount*** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • *Reports* • *Newspaper*	**Poetry - Kennings and List Poems** **Non-chronological report** **Recount** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • *Reports* • *Newspaper*	**Narrative - Stories from other cultures** **Biography** (eg Mary Anning – science link) ***Recount*** *(one of/ could link with topic)* • *Personal* • *Letters* • *Diaries* • *Reports* • *Newspaper*

Eagles / Swallows **Cycle A- Term 1** **The Final Frontier**	**Eagles / Swallows** **Cycle A- Term 2** **The Home Front**	**Eagles / Swallows** **Cycle A- Term 3** **A knight's Tale**
Recount Writing **Biography/Autobiography** (eg Neil Armstrong – science link) ***Recount*** *(one of/ could link with topic)* • *Personal* • ***Letters-*** • ***Diaries*** • *Newspaper* • ***Reports –Magazine articles***	**Narrative – Historical** (eg I Believe in Unicorns or Friend or Foe or The Amazing Story of Adolphus Tips by Michael Morpurgo/ Carries War by Nina Bowden) **Persuasion** (eg evacuation – come to the countryside, leave the danger behind or food products using rationing – link to DT) ***Recount*** *(one of/ could link with topic)* • *Personal* • ***Letters*** • ***Diaries*** • *Newspaper* • ***Reports*** • ***Magazine articles***	**Non-chronological reports** **Poetry** – Narrative (eg The Highway man or the Lady of Shallot) ***Recount*** *(one of/ could link with topic)* • *Personal* • ***Letters*** • ***Diaries*** • *Newspaper* • ***Reports*** • ***Magazine articles***
Eagles / Swallows **Cycle B Term 1** **We are not Amused (Victorians)**	**Eagles / Swallows** **Cycle B Term 2** **Earth Matters**	**Eagles / Swallows** **Cycle B Term 3** **It's all Greek to me**
Recount Writing **Balance Argument / Debate** (eg the workhouse – good or bad? Should we have a railway or not?) in topic work *Recount (one of/ could link with topic)* • *Personal* • ***Letters*** • ***Diaries*** • *Newspaper* • ***Reports*** • ***Magazine articles***	**Explanation writing** -(eg Volcanoes/Earthquakes) **Narrative – Fantasy** (eg Tales from Outer Suburbia Shaun Tan) ***Recount*** *(one of/ could link with topic)* • *Personal* • ***Letters*** • ***Diaries*** • *Newspaper* • ***Reports*** • ***Magazine articles***	**Narrative – Greek Myths** **Poetry - Blank verse / free verse** (figurative language) ***Recount*** *(one of/ could link with topic)* • *Personal* • ***Letters*** • ***Diaries*** • *Newspaper* • ***Reports*** • ***Magazine articles***

Key Stage 2 Long Term Plan

Woodpeckers/ Kingfishers

<table>
<tr>
<td>Cycle A -Term 1
<u>Mayans</u>

Yr4 States of matter
• compare and group materials together, according to whether they are solids, liquids or gases
• observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
• identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
WS Methods(Must be done)
Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests
• and finding things out using secondary sources

Year 4 Sound
• identify how sounds are made, associating some of them with something vibrating
• recognise that vibrations from sounds travel through a medium to the ear
• find patterns between the pitch of a sound and features of the object that produced it
• find patterns between the volume of a sound and the strength of the vibrations that produced it
• recognise that sounds get fainter as the distance from the sound source increases.
WS Methods(Must be done)</td>
<td>Cycle A- Term 2
<u>Invaders and Settlers (Vikings)</u>

Year 3 Animals including 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
• identify that humans and some other animals have skeletons and muscles for support, protection and movement.
WS Methods(Must be done)
Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests and finding things out using secondary sources

Yr4 Animals including humans
• construct and interpret a variety of food chains, identifying producers, predators and prey.
WS Methods(Must be done)
Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests
•
• and finding things out using secondary sources

Year 4 All living things
• recognise that environments can change and that this can sometimes pose dangers to living things.
• recognise that living things can be grouped</td>
<td>Cycle A- Term 3
<u>Tudor Explorers</u>

Year 3 Magnets and friction
• compare how things move on different surfaces
• notice that some forces need contact between two objects, but magnetic forces can act at a distance
• observe how magnets attract or 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.
WS Methods(Must be done)
Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests
• and finding things out using secondary sources</td>
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<table>
<tr>
<td>Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests
• and finding things out using secondary sources</td>
<td>in a variety of ways
• explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
WS Methods(Must be done)
Using different types of scientific enquiry to answer their own questions, including:
• observing changes over time,
• noticing patterns,
• grouping and classifying things,
• carrying out simple comparative and fair tests
• and finding things out using secondary sources</td>
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<tr>
<td colspan="3"><u>Must be covered over the year for Year 3/4</u>
Working Scientifically (PoS+Overview)
• Ask their own questions about what they observe
• Make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including: observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources
• asking relevant questions and using different types of scientific enquiries to answer them
• setting up simple practical enquiries, comparative and fair tests
• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
• identifying differences, similarities or changes related to simple scientific ideas and processes
• using straightforward scientific evidence to answer questions or to support their findings.
Draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.</td>
</tr>
</table>

Cycle A -Term 1 **Mayans**	Cycle A- Term 2 **Invaders and Settlers (Vikings)**	Cycle A- Term 3 **Tudor Explorers**
History • Achievements of the earliest civilisations – an overview of where and when the first civilisations appeared and an in depth study of the Mayans. • A non-European society that provides a contrast with British history. **Geography** • Locate the world's countries, using maps to focus on North and South America. To focus on environmental regions and the most significant human and physical features including countries and major cities. • Describe and understand key aspects of physical geography, including the water cycle. **Art and Design - Drawing** Skills: Use a number of sketches to base work on. Sketch lightly. Use different grades of pencil at different angles to show different tones. Use hatching and crosshatching to show tone and texture. *Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between own and others work.* *Adapt and improve work.* **Design Technology** **Food** – Skills: Select ingredients for food products.	**History** • The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor. • A local history study **Geography** • 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. **Art and Design - Textiles** Skills: Learn the basics of cross-stitch and backstitch. Understand the basics of quilting, padding and gathering fabric. Know how to colour fabric and use this in design. *Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between own and others work.* *Adapt and improve work.* **Design Technology** **Textiles** – Skills: Use sharp scissors accurately to cut textiles Understand that texture and other properties of materials affect choice.	**History** • A study of an aspect or theme in British History that extends the pupils' chronological knowledge beyond 1066. **Geography** • 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. **Art and Design - Painting:** Mix colours using tints and tones. Use watercolour paint to produce washes for backgrounds and then add detail. Use thin and thick brushes to produce shapes, textures, patterns and lines. *Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between own and others work.* *Adapt and improve work.*

Work in a safe and hygienic way. Measure out ingredients by weight or quantity, using scales where appropriate. Describe the product in terms of taste, texture, flavour and relate this to the intended purpose.	Adapt design as work progresses. Use permanent and temporary fastenings.	
Cycle B Term 1 **Stone Age to Bronze Age** **Yr3 Light** • recognise that they need light in order to see things and that dark is the 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 a solid object • find patterns in the way that the size of shadows change. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources	Cycle B Term 2 **Romans** **Year 3 Plants** • 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, and room to grow) and 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 flowering plants, including pollination, seed formation and seed dispersal. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests and finding things out using secondary sources	Cycle B Term 3 **Ancient Egyptians** **Year 3 Rocks and fossils** • compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • describe in simple terms how fossils are formed when things that have lived are trapped within rock • recognise that soils are made from rocks and organic matter. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources
Must be covered over the year for Year 3/4 Working Scientifically (PoS+Overview) • Ask their own questions about what they observe • Make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including: observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources		

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences, similarities or changes related to simple scientific ideas and processes
- using straightforward scientific evidence to answer questions or to support their findings.

Draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

Cycle B Term 1 **Stone Age to Bronze Age**	Cycle B Term 2 **Romans**	Cycle B Term 3 **Ancient Egyptians**
History • Changes in Britain from the Stone Age to the Iron Age. Eg Late Neolithic hunter-gathers and early farmers; Bronze Age religion, technology and travel. Iron Age hill forts: tribal kingdoms, farming art and culture. **Geography** • Field work (inc map and compass work) **Art and Design - Printing** Skills: Make printing blocks and experiment with different materials. Make a one coloured print. Build layers of colours to make prints of 2 or more colours. *Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between own and others work.* *Adapt and improve work.*	**History** • The Roman Empire and its impact on Britain.eg Julius Caesar's attempted invasion in 55-54BC; Successful invasion by Claudius and conquest; British resistance – Boudica, 'Romanisation' of Britain. **Geography** • Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region in a European country. **Art and Design - Collage** Skills: Precise cutting skills Use coiling and overlapping. Use mosaic / montage Use tessellation and other patterns in design. Study mosaic / montage from other cultures. *Use a sketch book to explore ideas and collect visual and other information. Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between own and others work.* *Adapt and improve work.*	**History** • The achievements of the earliest civilisations – an overview of where and when the first civilisations appeared and a depth study of the Ancient Egyptians. **Geography** • Rivers (The Nile and Nile Delta) **Art and Design - 3D** Skills: Make nets to create recognisable forms. Experiment with making life size models. Use clay techniques to apply to pottery studied in other cultures. Use the technique of adding materials to create texture, feeling, expression or movement (eg wrinkles on a portrait sculpture). *Use a sketch book to explore ideas and collect visual and other information.* *Comment on similarities and differences between*

Design Technology **Stiff and flexible sheet materials** – Skills: Use scoring, and folding to shape materials accurately. Make cuts (scissors, snips, saw) accurately. Make holes (punch, drill) accurately. Be precise to produce high quality products.	**Design Technology** **Stiff and flexible sheet materials** – Skills: Join materials to make products using both permanent and temporary fastenings. Be precise to produce high quality products.	*own and others work.* *Adapt and improve work.* **Design Technology** **Food–** Skills: Select ingredients for food products. Work in a safe and hygienic way. Measure out ingredients by weight or quantity, using scales where appropriate. Describe the product in terms of taste, texture, flavour and relate this to the intended purpose.

Eagles /Swallows

Cycle A- Term 1 **The Final Frontier**	Cycle A- Term 2 **The Home Front**	Cycle A- Term 3 **A knight's Tale**
Year 5 Earth and space • describe the movement of the Earth, and other planets, relative to the Sun in the solar system • 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. WS Methods (Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over different periods of time, • noticing patterns, • grouping and classifying things, • carrying out comparative and fair tests • and finding things out using a wide range of secondary sources.	**Year 6 Animals including humans** • identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • describe the ways in which nutrients and water are transported within animals, including humans. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over different periods of time, • noticing patterns, • grouping and classifying things • carrying out comparative and fair tests and finding things out using a wide range of secondary sources	**Year 5 Forces** • 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 • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over different periods of time, • noticing patterns, • grouping and classifying things, • carrying out comparative and fair tests • finding things out using a wide range of secondary sources. **Year 6 Living things and their habitats** • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals give reasons for classifying plants and animals based on specific : • observing changes over different periods of time, • noticing patterns, • grouping and classifying things • carrying out comparative and fair

		tests • and finding things out using a wide range of secondary sources. • characteristics. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including

Must be covered over the year for Year 5/6

Working Scientifically (PoS+Overview)

- Asking their own questions about scientific phenomena
- Select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.
- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings

Cycle A- Term 1 **The Final Frontier**	Cycle A- Term 2 **The Home Front**	Cycle A- Term 3 **A knight's Tale**
History • Significant turning point in world history –Space Travel/Moon landings **Geography** • Local Study (**mapping skills**, human and physical geography) **Art and Design - Painting** Skills: Create colours by mixing to represent images	**History** • A significant turning point in British History – eg Battle of Britain/Dunkirk **Geography** • Locate the world's countries, using maps to Focus on Europe, concentrating on their environmental regions, key physical and human characteristics, countries and major cities. **Art and Design - Printing** Skills:	**History** • A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066. **Art and Design - Textiles** Skills: Use applique, embroidery, plaiting and/or

form the natural and man-made world. Experiment with colour to create mood. Use colour and shape to reflect mood and feelings. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* **Design Technology** **Stiff and flexible materials** – Skills: (ready for next terms DT project – food packaging) Accurately measure using mm. Use scoring and folding to shape materials accurately with a focus on precision. (link to 3D shape) Make holes (punch, drill) accurately. Make strong and stable joins, giving strength to the product. Create some flexible joins to allow for dismantling or folding. Be precise to produce products with a high quality finish. (eg food packaging / gas mask containers next term) *Create steps by step plans* *Take the views of users into account.* *Represent ideas using words, labelled sketches and models to show constraints of the design.* *Reflect on designs and develop them bearing in mind the way in which they will be used.* *Identify what is working well and what could be improved.*	Use a number of colours to build up a sequence. Use precise repeating patterns by creating accurate printing blocks. Base work on observational drawing. Study printmaking from other cultures or time periods. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* **Design Technology** **Food** – Skills: Use a selection of ingredients to meet an identified need (eg rationing). Work in a safe and hygienic way. Present food in packaging (use printing) using other DT skills. Persuade others to take an interest in the product – part of packaging design – link to literacy skills. *Create steps by step plans* *Take the views of users into account.* *Represent ideas using words, labelled sketches and models to show constraints of the design.* *Reflect on designs and develop them bearing in mind the way in which they will be used.* *Identify what is working well and what could be improved.*	finger knitting. Base work on tapestries, artefacts and hanging throughout history and in other cultures. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* **Design Technology** **Textiles** – Skills: Textile product to incorporate the views of the intended user / and or purpose. Use textile skills from art to create a sturdy product fit for purpose. Include structural changes (such as plaiting or weaving) to create new products such as rope belts or bracelets. *Create steps by step plans* *Take the views of users into account.* *Represent ideas using words, labelled sketches and models to show constraints of the design.* *Reflect on designs and develop them bearing in mind the way in which they will be used.* *Identify what is working well and what could be improved.*

Cycle B Term 1 **We are not Amused (Victorians)**	Cycle B Term 2 **Earth Matters**	Cycle B Term 3 **It's all Greek to me**
Year 5 Living things and their habitats • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over different periods of time, • noticing patterns, • grouping and classifying things, (Maths links) • carrying out comparative and fair tests • and finding things out using a wide range of secondary sources. **Year 6 Living things and their habitats (last Term)** • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • give reasons for classifying plants and animals based on specific : • observing changes over different periods of time, • noticing patterns, • grouping and classifying things • carrying out comparative and fair tests • and finding things out using a wide range of secondary sources. • characteristics.	**Year 4 Electricity** • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over time, • noticing patterns, • grouping and classifying things, • carrying out simple comparative and fair tests • and finding things out using secondary sources **Year 6 Electricity** • associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • use recognised symbols when representing a simple circuit in a diagram. WS Methods(Must be done)	**Year 6 Light** • recognise that light appears to travel in straight lines • use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes • use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. WS Methods(Must be done) Using different types of scientific enquiry to answer their own questions, including: • observing changes over different periods of time, • noticing patterns, • grouping and classifying things • carrying out comparative and fair tests and finding things out using a wide range of secondary sources **Year 5 Properties of materials** • compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • use knowledge of solids, liquids and gases to decide how mixtures might be

WS Methods(Must be done)

Using different types of scientific enquiry to answer their own questions, including

Yr6 Evolution and inheritance

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

WS Methods(Must be done)

Using different types of scientific enquiry to answer their own questions, including:

- observing changes over different periods of time,
- noticing patterns,
- grouping and classifying things
- carrying out comparative and fair tests
- and finding things out using a wide range of secondary sources.

Using different types of scientific enquiry to answer their own questions, including:

- observing changes over different periods of time,
- noticing patterns,
- grouping and classifying things
- carrying out comparative and fair tests
- and finding things out using a wide range of secondary sources.

done)

separated, including through filtering, sieving and evaporating

- give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
- demonstrate that dissolving, mixing and changes of state are reversible changes
- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.

WS Methods(Must be done)

Using different types of scientific enquiry to answer their own questions, including:

- observing changes over different periods of time,
- noticing patterns,
- grouping and classifying things,
- carrying out comparative and fair tests
- and finding things out using a wide range of secondary sources.

Must be covered over the year for Year 5/6

Working Scientifically (PoS+ Overview)

- Asking their own questions about scientific phenomena
- Select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources.
- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests

- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings

Cycle B Term 1 **We are not Amused (Victorians)**	Cycle B Term 2 **Earth Matters**	Cycle B Term 3 **It's all Greek to me**
History • An in-depth study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066. • A significant turning point in British history, for example the first railways. **Geography** • Coasts (link to growth of seaside towns) **Art and Design - Collage** Skills: Experiment with techniques that use contrasting textures, colours or patterns (rough/smooth, light/dark, plain/patterned). Experiment with ceramic mosaic techniques to produce a piece of art. Base work on observational drawings. Collage combines visual and tactile qualities. Take inspiration form artists or designers. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* **Design Technology** **Food** – Skills:	**Geography** • Volcanoes and Earthquakes • Mountains • Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts. **Art and Design - 3D** Skills: Use a variety of tools and techniques for sculpting clay, papier mache and other mouldable materials. Use carvings on a surface to create shapes, textures and patterns. Explore paper techniques such as origami. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* *Skills:* *Use shading to add interesting effects to drawings, using different grades of pencil* *Use a variety of different lines to indicate movement in drawings.*	**History** • Ancient Greece a study of Greek life and achievements and their influence on the Western World. **Art and Design - Drawing** Skills: Use shading to add interesting effects to drawings, using different grades of pencil Use a variety of different lines to indicate movement in drawings. Use shading to show shadow reflections on 3D shapes. *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* Skills: Use a variety of tools and techniques for sculpting clay, papier mache and other mouldable materials. Use carvings on a surface to create shapes, textures and patterns. Explore paper techniques such as origami.

Use a selection of ingredients to meet an identified need. (eg work house rations) Work in a safe and hygienic way. Present food in packaging using other DT skills. Persuade others to take an interest in the product – part of packaging design – link to literacy skills. *Create steps by step plans* *Take the views of users into account.* *Represent ideas using words, labelled sketches and models to show constraints of the design.* *Reflect on designs and develop them bearing in mind the way in which they will be used.* *Identify what is working well and what could be improved*	*Use shading to show shadow reflections on 3D shapes.* *Explore ideas and collect visual and other information for work.* *Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made.* *Adapt and refine work to reflect the purpose and meaning of work.* **Design Technology** **Electrical and Mechanical Components** – Skills: Make a product that uses both electrical and mechanical components. Use switches or ICT equipment for control. Adapt design to solve problems as they occur. Make product both useful and attractive – to appeal to the targeted user. *Create steps by step plans* *Take the views of users into account.* *Represent ideas using words, labelled sketches and models to show constraints of the design.* *Reflect on designs and develop them bearing in mind the way in which they will be used.* *Identify what is working well and what could be improved.*	Explore ideas and collect visual and other information for work. Make comments on the ideas, methods and approaches used in work, relating these to the context in which work was made. Adapt and refine work to reflect the purpose and maning of work.