# Sledmere and We twang Federation

# Whole School Curriculum Map – Science

At Sledmere and Wetwang Federation our **intent** is to give children a Science curriculum which enables them to explore and discover the world around them.

Our **intent** is that all children:

- Achieve their potential by having the highest expectations of their learning.
- Are inspired by our teaching.
- Develop understanding of the nature, processes and methods of Science through different types of enquiries.
- Are confident to ask questions, challenge themselves and extend their scientific knowledge.
- Develop the essential scientific enquiry skills to deepen their scientific knowledge.
- Use a range of methods to communicate their scientific information and present it in a systematic and scientific manner.
- Develop a respect for the materials and equipment they handle with regard to their own, and other children's safety.
- Understand the importance of Scence in today's world and inspire them for their future.

We **implement** our Science curriculum through:

- In EYFS, we implement Science through enhancing provision for children to explore scientific concepts such as melting, freezing, floating and sinking. We promote children's independence to choose ways to do things and promote their curiosity. In EYFS, we encourage outside visitors to come and speak to the children to promote opportunities for awe and wonder!
- Science is taught weekly week.
- Working walls reflect what is being taught, vocabulary, relevant diagrams, photos and learning journeys.
- Books that are high quality and show a range of evidence. Teachers have thehighest expectationsand children are proud of their work!
- Weekly experiments focusing on scientific enquiry.
- A creative and innovative approach using a range of high quality resources and teaching methods
- Working scientifically skills are embedded into every lesson to ensure these skills are being developed throughout.
- Learning across the curriculum is sequentially planned to build on knowledge and skills.

'Learning and growing in the love of God.'
( 1 John 4:16 )

The **impact** of our Science approach is that our children to demonstrate their scientific knowledge and skills. They are curious life-long learners who are eager to explore the world around them and find out how and why.

'Learning and growing in the love of God.'
( 1 John 4:16 )

| Year 1 | | | | | | | | | | | | | |
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| **Strand** | **Where from?** | **Aut 1 Cycle A 2023 - 2024** | **Aut 1 Cycle B 2022 - 2023** | **Aut 2 Cycle A 2023 - 2024** | **Aut 2 Cycle B 2022 - 2023** | **Spr1 Cycle A 2023 - 2024** | **Spr 1 Cycle B 2022 - 2023** | **Spr2 Cycle A 2023 - 2024** | **Spr 2 Cycle B 2022 - 2023** | **Sum1 Cycle A 2023 - 2024** | **Sum 1 Cycle B 2022 - 2023** | **Sum2 Cycle A 2023 - 2024** | **Sum2 Cycle B 2022 - 2023** |
| | | **What was school like in Victorian Times?(History)** | **What toys did our Grandparents play with?** | **Is Rio like Sledmere/Wetwang?** | **Where is London and what is it like?** | **Who has been into space?** | **What can stories tell us about other countries?** | **How can art help us find out about animals?** | **How long ago did the dinosaurs live?** | **Would DT have helped traditional tale characters?** | **What happens in the sky?** | **How can we be superheroes?** | **What can you create with woodland objects?** |
| | **NC** | How big is a rain drop? | Why do we have two eyes? | How does it feel? | Can you be a superhero? | Can you leap like a frog? | Does it snow in summer? | Does it snow in summer? | What makes the loudest sound? | Whose poo? | How does it move? | How do leaves change? What can worms sense? | How wild is the wind? |
| **Working scientifically** | 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. | | | | | | | | | | | | |
| | Gathering and recording data to help in answering questions. | | | | | | | | | | | | |
| **Plants** | Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. | | | | | | | | | | | | |
| | Identify and describe the basic structure of a variety | | | | | | | | | | | | |

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| | of common flowering plants, including trees. | | | | | | | | | | | | |
| **Animals, including humans** | Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. | | | | | | | | | | | | |
| | Identify and name a variety of common animals that are carnivores, herbivores and omnivores. | | | | | | | | | | | | |
| | Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). | | | | | | | | | | | | |
| | Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. | | | | | | | | | | | | |
| **Everyday materials** | Distinguish between an object and the material from which it is made. | | | | | | | | | | | | |
| | Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. | | | | | | | | | | | | |
| | Describe the simple physical properties of a variety of everyday material. | | | | | | | | | | | | |
| | Compare and group together a variety of everyday materials on the basis of their simple physical properties. | | | | | | | | | | | | |

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| **Seasonal changes** | Observe changes across the four seasons. | | | | | | | | | | | | |
| | Observe and describe weather associated with the seasons and how day length varies. | | | | | | | | | | | | |

# Year 2

| Strand | | Aut 1 Cycle A 2021 - 2022 | Aut 1 Cycle B 2022 - 2023 | Aut 2 Cycle A 2021 - 2022 | Aut 2 Cycle B 2022 - 2023 | Spr1 Cycle A 2021 - 2022 | Spr 1 Cycle B 2022 - 2023 | Spr2 Cycle A 2021 - 2022 | Spr 2 Cycle B 2022 - 2023 | Sum1 Cycle A 2021 - 2022 | Sum 1 Cycle B 2022 - 2023 | Sum1 Cycle A 2021 - 2022 | Sum2 Cycle B 2022 - 2023 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Unit** | **What is our local area famous for? (History)** | **What is an insect? (Science)** | **What causes earthquakes and what are volcanoes? (Geography)** | **How have trains made travel easier? (History)** | **How have humans decorated their urban environments? (Art and Design/ Geography)** | **Which is our favourite fruit? (DT)** | **Why did the Anglo-Saxons settle in Britain? (History)** | **How do rivers get their water? (Geography)** | **Can you design and make a cunning contraption? (DT)** | **How did Britain change from the Stone Age to the Iron Age? (History)** | **Young Leaders (RE)** | **What is the coastline like in Yorkshire? (Geography)** |
| | **Strand from NC** | Identifying and comparing everyday materials; Identifying plants in the local area *Working scientifically* | Living Things and their habitats *Working scientifically* | Rocks *Working scientifically* | *Plants Working scientifically* | Light and shadows *Working scientifically* | *Animals including Humans Working scientifically* | *Plants Working scientifically* | Forces *Working scientifically* | Everyday Materials *Working scientifically* | Living Things and their habitats *Working scientifically* | Living things and their Habitats *Working scientifically* | Animals including Humans |
| | **LTI** | Which stuff is stickier? – Y2 | *LTI: Do insects have a favourite colour?* | How do fossils form? – Y3 | *LTI: Why do cat's eyes glow at night?* | *Why do Shadows Change? LTI* | *LTI: Which is the juiciest fruit? Is it safe to eat?* | N/A | *LTI: Can you make a paper bridge? How fast does water flow?* | Can you find the treasure? – Y2 | *N/A* | *What's on your wellies? LTI* | *LTI: Will it degrade? Why do boats float?* |
| **Working Scientifically** | To ask simple questions and recognise that they can be answered in different ways. | | | | | | | | | | | | |
| | To observe closely, use simple equipment. | | | | | | | | | | | | |
| | To perform simple tests. | | | | | | | | | | | | |
| **Living Things and their Habitats** | To explore and compare the differences between things that are living, dead, and things that have never been alive. | | | | | | | | | | | | |
| | To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, | | | | | | | | | | | | |

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| | and how they depend on each other. | | | | | | | | | | | | |
| | To identify and name a variety of plants and animals in their habitats, including microhabitats. | | | | | | | | | | | | |
| | To describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. | | | | | | | | | | | | |
| **Plants** | To observe and describe how seeds and bulbs grow into mature plants | | | | | | | | | | | | |
| | To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. | | | | | | | | | | | | |
| **Uses of Everyday Materials** | To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. | | | | | | | | | | | | |
| **Animals, including humans** | To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. | | | | | | | | | | | | |

'Learning and growing in the love of God.'
( 1 John 4:16 )

# Year 3

| Strand | | Aut 1 Cycle A 2021 - 2022 | Aut 1 Cycle B 2022 - 2023 | Aut 2 Cycle A 2021 - 2022 | Aut 2 Cycle B 2022 - 2023 | Spr1 Cycle A 2021 - 2022 | Spr 1 Cycle B 2022 - 2023 | Spr2 Cycle A 2021 - 2022 | Spr 2 Cycle B 2022 - 2023 | Sum1 Cycle A 2021 - 2022 | Sum 1 Cycle B 2022 - 2023 | Sum1 Cycle A 2021 - 2022 | Sum2 Cycle B 2022 - 2023 |
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| | **Unit** | **What is our local area famous for? (History)** | **What is an insect? (Science)** | **What causes earthquakes and what are volcanoes? (Geography)** | **How have trains made travel easier? (History)** | **How have humans decorated their urban environments? (Art and Design/ Geography)** | **Which is our favourite fruit? (DT)** | **Why did the Anglo-Saxons settle in Britain? (History)** | **How do rivers get their water? (Geography)** | **Can you design and make a cunning contraption? (DT)** | **How did Britain change from the Stone Age to the Iron Age? (History)** | **Young Leaders (RE)** | **What is the coastline like in Yorkshire? (Geography)** |
| | **Strand from NC** | Identifying and comparing everyday materials; Identifying plants in the local area *Working scientifically* | Living Things and their habitats *Working scientifically* | Rocks *Working scientifically* | *Plants Working scientifically* | Light and shadows *Working scientifically* | *Animals including Humans Working scientifically* | *Plants Working scientifically* | Forces *Working scientifically* | Everyday Materials *Working scientifically* | Living Things and their habitats *Working scientifically* | Living things and their Habitats *Working scientifically* | Animals including Humans |
| | **LTI** | Which stuff is stickier? – Y2 | *LTI: Do insects have a favourite colour?* | How do fossils form? – Y3 | *LTI: Why do cat's eyes glow at night?* | *Why do Shadows Change? LTI* | *LTI: Which is the juiciest fruit? Is it safe to eat?* | N/A | *LTI: Can you make a paper bridge? How fast does water flow?* | Can you find the treasure? – Y2 | *N/A* | *What's on your wellies? LTI* | *LTI: Will it degrade? Why do boats float?* |
| **Working Scientifically** | Asking relevant questions and using different types of scientific enquiries to answer them. | | | | | | | | | | | | |
| | Setting up simple practical enquiries, comparative and fair tests. | | | | | | | | | | | | |
| **Plants** | To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. | | | | | | | | | | | | |
| | To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary | | | | | | | | | | | | |

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| | from plant to plant. | | | | | | | | | | | | |
| | To investigate the way in which water is transported within plants. | | | | | | | | | | | | |
| | To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | | | | | | | | | | | | |
| **Rocks** | To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. | | | | | | | | | | | | |
| | To describe in simple terms how fossils are formed when things that have lived are trapped within rock. | | | | | | | | | | | | |
| | To recognise that soils are made from rocks and organic matter. | | | | | | | | | | | | |
| **Forces and Magnets** | To compare how things move on different surfaces. | | | | | | | | | | | | |
| | To notice that some forces need contact between two objects, but magnetic forces can act at a distance. | | | | | | | | | | | | |
| | To observe how magnets attract or repel each other and attract some materials and not others. | | | | | | | | | | | | |
| | To 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. | | | | | | | | | | | | |
| | To describe magnets as having two poles predict whether two magnets will attract or repel each other, depending on which poles are facing. | | | | | | | | | | | | |
| **Light** | To recognise that they need light in order to see things and that dark is the absence of light. | | | | | | | | | | | | |
| | To notice that light is reflected from surfaces. | | | | | | | | | | | | |
| | To recognise that light from the sun can be dangerous and that there are ways to protect their eyes. | | | | | | | | | | | | |
| | To recognise that shadows are formed when the light from a light source is blocked by an opaque object. | | | | | | | | | | | | |
| | To find patterns in the way that the size of shadows change. | | | | | | | | | | | | |
| **Animals, including humans** | 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. | | | | | | | | | | | | |

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| | To identify that humans and some other animals have skeletons and muscles for support, protection and movement. | | | | | | | | | | | | |

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# Year 4

| Strand | Where from? | Aut 1 Cycle A 2021 - 2022 | Aut 1 Cycle B 2022 - 2023 | Aut 1 Cycle C 2023 - 2024 | Aut 2 Cycle A 2021 - 2022 | Aut 2 Cycle B 2022 - 2023 | Aut 2 Cycle C 2023 - 2024 | Spr1 Cycle A 2021 - 2022 | Spr 1 Cycle B 2022 - 2023 | Spr 1 Cycle C 2023 - 2024 | Spr2 Cycle A 2021 - 2022 | Spr 2 Cycle B 2022 - 2023 | Spr 2 Cycle C 2023 - 2024 | Sum1 Cycle A 2021 - 2022 | Sum 1 Cycle B 2022 - 2023 | Sum 1 Cycle C 2023 - 2024 | Sum1 Cycle A 2021 - 2022 | Sum2 Cycle B 2022 - 2023 | Sum 2 Cycle C 2023 - 2024 |
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| | | **What makes us unique? (ID Yr6) (Science)** | **What was the Roman legacy in Britain? (History)** | **What is life like in the polar regions? (Geography)** | **Why was the Battle of Britain a turning point in British history? (History)** | **What can we learn by comparing artwork from different times and cultures? (Art and Deisgn)** | **How do impressionism and expressionism differ? (Art and Design)** | **How does the Sierra Nevada Mountain range compare with the landscape in Sledmere/ Wetwang? (Geography)** | **What was life like during the Bubonic Plague outbreak of the 14th Century? (History)** | **What were the achievements of the ancient Egyptians? (History)** | **What impact did the Ancient Greeks have on modern life? (History)** | **What was Britain's role in the slave trade from Africa? (History)** | **DT Project (DT)** | **How are humans changing the world's oceans? (Science)** | **How was the Maya civilisation so sophisticated? (Geography)** | **What happened in 1066? Yr4 (History)** | **What was life like under Henry VIII? (History)** | **Young Leaders (RE)** | **Young Leaders (RE)** |
| | **NC strand** | Living Things and their Habitats *Working scientifically* | Sound (Y4) *Working scientifically* | | Evolution and Inheritance *Working scientifically* | States of Matter (Y4) *Working scientifically* | Animals including Humans (Y5/6) | Living things and their habitats *Working scientifically* | Forces (Y5/6) *Working scientifically* | States of Matter Working Scientifically | Electricity (Y4) *Working scientifically* | Animals including Humans | Changing Materials (Y5/6) Working Scientifically | Living Things and their Habitats *Working scientifically* | Electricity *Working scientifically* | Light (Y6) Working scientifically | Space and Earth *Working scientifically* | Science of Sport *Working scientifically* | Living Things and their Habitats (Y5/6) Working scientifically |
| | **LTI** | How does inheritance work? | How far can sound travel? | *How many worms are underground?* | Can you send a coded message? | Is custard a liquid? | *What can your heart rate tell you?* | What do squirrels eat? | What do pulleys do? | *Is green really green?* | What conducts electricity? | How does toothpaste protect your teeth? | *Can you clean dirty water?* | How does pollution effect habitats? | *How do plugs work?* | How can we make Red? | How does the moon move? | How does blood flow? | What is the life cycle of a meal worm? |
| **Working scientifically** | Asking relevant questions and using different types of scientific enquiries to answer them. | | | | | | | | | | | | | | | | | | |
| | Setting up simple practical enquiries, comparative and fair tests. | | | | | | | | | | | | | | | | | | |
| | Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. | | | | | | | | | | | | | | | | | | |

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| | To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. | | | | | | | | | | | | | | | | | | |
| | To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. | | | | | | | | | | | | | | | | | | |
| | To use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. | | | | | | | | | | | | | | | | | | |
| | To identify differences, similarities or changes related to simple scientific ideas and processes. | | | | | | | | | | | | | | | | | | |
| | To use straightforward scientific evidence to answer questions or to support their findings. | | | | | | | | | | | | | | | | | | |
| **Living things and their habitats** | To recognise that living things can be grouped in a variety of ways. | | | | | | | | | | | | | | | | | | |
| | To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. | | | | | | | | | | | | | | | | | | |
| | To recognise that environments can change and that this can sometimes pose dangers to living things. | | | | | | | | | | | | | | | | | | |
| **Animals, including humans** | To describe the simple functions of the basic parts of the digestive system in humans. | | | | | | | | | | | | | | | | | | |
| | To identify the different types of teeth in humans | | | | | | | | | | | | | | | | | | |

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| | and their simple functions. | | | | | | | | | | | | | | | | | | |
| | To construct and interpret a variety of food chains, identifying producers, predators and prey. | | | | | | | | | | | | | | | | | | |
| **States of matter** | To compare and group materials together, according to whether they are solids, liquids or gases. | | | | | | | | | | | | | | | | | | |
| | To 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). | | | | | | | | | | | | | | | | | | |
| | To identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. | | | | | | | | | | | | | | | | | | |
| **Sound** | To identify how sounds are made, associating some of them with something vibrating . | | | | | | | | | | | | | | | | | | |
| | To recognise that vibrations from sounds travel through a medium to the ear. | | | | | | | | | | | | | | | | | | |
| | To find patterns between the pitch of a sound and features of the object that produced it. | | | | | | | | | | | | | | | | | | |
| | To find patterns between the volume of a sound and the strength of the vibrations that produced it. | | | | | | | | | | | | | | | | | | |
| | To recognise that sounds get fainter as the distance from the sound | | | | | | | | | | | | | | | | | | |

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| | source increases. | | | | | | | | | | | | | | | | | | |
| **Electricity** | To identify common appliances that run on electricity . | | | | | | | | | | | | | | | | | | |
| | To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. | | | | | | | | | | | | | | | | | | |
| | To 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 batter. | | | | | | | | | | | | | | | | | | |
| | To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit . | | | | | | | | | | | | | | | | | | |
| | To recognise some common conductors and insulators, and associate metals with being good conductors. | | | | | | | | | | | | | | | | | | |

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| Year 5 | | | | | | | | | | | | | | | | | | | |
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| **Strand** | **NC** | **Aut 1 Cycle A 2021 - 2022** | **Aut 1 Cycle B 2022 - 2023** | **Aut 1 Cycle C 2023 - 2024** | **Aut 2 Cycle A 2021 - 2022** | **Aut 2 Cycle B 2022 - 2023** | **Aut 2 Cycle C 2023 - 2024** | **Spr1 Cycle A 2021 - 2022** | **Spr 1 Cycle B 2022 - 2023** | **Spr 1 Cycle C 2023 - 2024** | **Spr2 Cycle A 2021 - 2022** | **Spr 2 Cycle B 2022 - 2023** | **Spr 2 Cycle C 2023 - 2024** | **Sum1 Cycle A 2021 - 2022** | **Sum 1 Cycle B 2022 - 2023** | **Sum 1 Cycle C 2023 - 2024** | **Sum1 Cycle A 2021 - 2022** | **Sum2 Cycle B 2022 - 2023** | **Sum 2 Cycle C 2023 - 2024** |
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| | **NC strand** | Living Things and their Habitats *Working scientifically* | Sound *Working scientifically* | | Evolution and Inheritance *Working scientifically* | States of Matter *Working scientifically* | Animals including Humans | Living things and their habitats *Working scientifically* | Forces *Working scientifically* | States of Matter Working Scientifically | Electricity *Working scientifically* | Animals including Humans | Changing Materials Working Scientifically | Living Things and their Habitats *Working scientifically* | Electricity *Working scientifically* | Light Working scientifically | Space and Earth *Working scientifically* | Science of Sport *Working scientifically* | Living Things and their Habitats Working scientifically |
| | **LTI** | How does inheritance work? | How far can sound travel? | *How many worms are underground?* | Can you send a coded message? | Is custard a liquid? | *What can your heart rate tell you?* | What do squirrels eat? | What do pulleys do? | *Is green really green?* | What conducts electricity? | How does toothpaste protect your teeth? | *Can you clean dirty water?* | How does pollution effect habitats? | *How do plugs work?* | How can we make Red? | How does the moon move? | How does blood flow? | What is the life cycle of a meal worm? |
| **Working scientifically** | 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 | | | | | | | | | | | | | | | | | | |

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| | 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. | | | | | | | | | | | | | | | | | | |
| | 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. | | | | | | | | | | | | | | | | | | |
| **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. | | | | | | | | | | | | | | | | | | |
| **Animals, including humans** | Describe the changes as humans develop to old age. | | | | | | | | | | | | | | | | | | |
| **Properties and changes of materials** | Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and | | | | | | | | | | | | | | | | | | |

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| | 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 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 | | | | | | | | | | | | | | | | | | |

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| | associated with burning and the action of acid on bicarbonate of soda. | | | | | | | | | | | | | | | | | | |
| **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. | | | | | | | | | | | | | | | | | | |
| **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, | | | | | | | | | | | | | | | | | | |

'Learning and growing in the love of God.'
( 1 John 4:16 )

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| | allow a smaller force to have a greater effect. | | | | | | | | | | | | | | | | | | |

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# Year 6

| Strand | NC | Aut 1 Cycle A 2021 - 2022 | Aut 1 Cycle B 2022 - 2023 | Aut 1 Cycle C 2023 - 2024 | Aut 2 Cycle A 2021 - 2022 | Aut 2 Cycle B 2022 - 2023 | Aut 2 Cycle C 2023 - 2024 | Spr1 Cycle A 2021 - 2022 | Spr 1 Cycle B 2022 - 2023 | Spr 1 Cycle C 2023 - 2024 | Spr2 Cycle A 2021 - 2022 | Spr 2 Cycle B 2022 - 2023 | Spr 2 Cycle C 2023 - 2024 | Sum1 Cycle A 2021 - 2022 | Sum 1 Cycle B 2022 - 2023 | Sum 1 Cycle C 2023 - 2024 | Sum1 Cycle A 2021 - 2022 | Sum2 Cycle B 2022 - 2023 | Sum 2 Cycle C 2023 - 2024 |
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| | | **What makes us unique? (ID Yr6) (Science)** | **What was the Roman legacy in Britain? (History)** | **What is life like in the polar regions? (Geography)** | **Why was the Battle of Britain a turning point in British history? (History)** | **What can we learn by comparing artwork from different times and cultures? (Art and Deisgn)** | **How do impressionism and expressionism differ? (Art and Design)** | **How does the Sierra Nevada Mountain range compare with the landscape in Sledmere/ Wetwang? (Geography)** | **What was life like during the Bubonic Plague outbreak of the 14th Century? (History)** | **What were the achievements of the ancient Egyptians? (History)** | **What impact did the Ancient Greeks have on modern life? (History)** | **What was Britain's role in the slave trade from Africa? (History)** | **DT Project (DT)** | **How are humans changing the world's oceans? (Science)** | **How was the Maya civilisation so sophisticated? (Geography)** | **What happened in 1066? Yr4 (History)** | **What was life like under Henry VIII? (History)** | **Young Leaders (RE)** | **Young Leaders (RE)** |
| | **NC strand** | Living Things and their Habitats *Working scientifically* | Sound *Working scientifically* | | Evolution and Inheritance *Working scientifically* | States of Matter *Working scientifically* | Animals including Humans | Living things and their habitats *Working scientifically* | Forces *Working scientifically* | States of Matter Working Scientifically | Electricity *Working scientifically* | Animals including Humans | Changing Materials Working Scientifically | Living Things and their Habitats *Working scientifically* | Electricity *Working scientifically* | Light Working scientifically | Space and Earth *Working scientifically* | Science of Sport *Working scientifically* | Living Things and their Habitats Working scientifically |
| | **LTI** | How does inheritance work? | How far can sound travel? | *How many worms are underground?* | Can you send a coded message? | Is custard a liquid? | *What can your heart rate tell you?* | What do squirrels eat? | What do pulleys do? | *Is green really green?* | What conducts electricity? | How does toothpaste protect your teeth? | *Can you clean dirty water?* | How does pollution effect habitats? | *How do plugs work?* | How can we make Red? | How does the moon move? | How does blood flow? | What is the life cycle of a meal worm? |
| **Working scientifically** | 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 | | | | | | | | | | | | | | | | | | |

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| | 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 | | | | | | | | | | | | | | | | | | |
| | 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. | | | | | | | | | | | | | | | | | | |
| Living things and their habitats | To recognise that living things can be grouped in a variety **of ways.** | | | | | | | | | | | | | | | | | | |
| | To explore and use classification keys to help group, identify and name a variety of living things in | | | | | | | | | | | | | | | | | | |

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| | their local and wider environment. | | | | | | | | | | | | | | | | | | |
| | To recognise that environments can change and that this can sometimes pose dangers to living things. | | | | | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | | | | | |
| **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. | | | | | | | | | | | | | | | | | | |

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| | Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. | | | | | | | | | | | | | | | | | | |
| **Lights** | 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. | | | | | | | | | | | | | | | | | | |
| **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 | | | | | | | | | | | | | | | | | | |

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| | on/off position of switches. | | | | | | | | | | | | | | | | | | |
| | Use recognised symbols when representing a simple circuit in a diagram. | | | | | | | | | | | | | | | | | | |