Science Curriculum Coverage Year A

Year 1 & 2 coverage	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Every Day Materials	Every Day Materials Seasonal Changes Autumn	Uses of everyday Materials Seasonal Changes Winter	Uses of everyday Materials Seasonal Changes Spring	Plants	Plants Seasonal Changes Summer
Year 1						
National Curriculum Objectives/Unit						
Scientific Enquiry						
Asking simple questions and recognising that they can be answered in different ways						
Observing closely, using simple equipment						

THRESHFIELD PRIMARY SCHOOL CURRICULUM COVERAGE

Performing simple tests						
Identifying and classifying						
Using 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 of common flowering plants including trees						
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 materials						
Compare and group together a variety of everyday						

materials on the basis of their simple physical properties						
Seasonal Changes						
Observe changes across the 4 seasons						
Observe and describe weather associated with the seasons and how day length varies						

Year 2						
National Curriculum Objectives/Unit						
Scientific Enquiry						
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 observations and ideas to suggest answers to questions						

Gathering and recording data to help in answering questions						
Plants						
Observe and describe how seeds and bulbs grow into mature plants						
Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy						
Everyday materials						
Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses						
Find out how the shapes of solid objects made from materials can be changed by squashing, bending, twisting and stretching						

Year 3 & 4 coverage	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	States of Matter	**Rocks**	**Forces and Magnets**	**Forces and Magnets**	**Electricity**	**Plants**
Year 3						

THRESHFIELD PRIMARY SCHOOL CURRICULUM COVERAGE

National Curriculum Objectives/Unit						
Scientific Enquiry						
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						
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						
Rocks						
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						

Forces and Magnets						
Compare how things move on different surfaces						
Notice that some forces need contact between 2 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 2 poles						
Predict whether 2 magnets will attract or repel each other, depending on which poles are facing						

Year 4						
National Curriculum Objectives/Unit						
Scientific Enquiry						
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						
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 degree Celsius						
Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature						
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 conductions						

THRESHFIELD PRIMARY SCHOOL CURRICULUM COVERAGE

Year 5 & 6 coverage	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Properties and Changes of Materials	**Properties and Changes of Materials**	**Forces**	**Forces**	**Electricity**	**Living Things and their Habitats**
Year 5						
National Curriculum Objectives/Unit						
Scientific Enquiry						
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 a 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						
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 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 associated with burning and the action of acid on bicarbonate of soda						
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						
Practical Investigation Skills Recap						
Identify and know the different types of variable in a fair test						
Know the value of a quality scientific diagram and how to construct one.						
Write a concise and accurate method						

Know how to collect and process data appropriate to an investigation						
Communicate results appropriate to the investigation						
Write up a complete investigation including a conclusion						
Year 6						
National Curriculum Objectives/Unit						
Scientific Enquiry						
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 a 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						
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						

THRESHFIELD PRIMARY SCHOOL CURRICULUM COVERAGE

THRESHFIELD PRIMARY SCHOOL CURRICULUM COVERAGE