

AAT Science Progression

| Terms 1/2 | | A Toy Story | Pudding to Pepys | Changing Ages | Walk like an Egyptian | We'll Meet Again | Who let the Gods out? |
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| | YR | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
| Term 1 Unit of study | The Natural World | Chemistry: Everyday materials NC obj Y1 | Chemistry: Everyday materials NC obj Y1 & Y2- floating/sinking | Chemistry: Rocks | Biology: Animals including Humans | Chemistry: Properties and changes of materials | Physics: Electricity |
| Term 2 Unit of study | The Natural World | Chemistry: Everyday materials NC obj Y2-material properties and suitability | Working scientifically | Biology: Animals including Humans | Biology: Living things and their habitats | Physics: Light | Working scientifically |
| Term 1 Scientific Vocabulary | | Hard/soft, shiny/dull rough/smooth, stretchy/stiff, bendy, waterproof, absorbent opaque/transparent/translucent, wood, metal, plastic, glass, water, rock, group/ classify | Float/ sink, Light/ heavy, air waterproof, buoyancy, brick, fabric, elastic, sponge, foil, cork | Sedimentary, igneous, Metaphoric, words associated with appearance and physical properties, fossils, rocks, soil, organic matter, grains, crystals, sandstone, granite, marble,classify and pumice | Digestive system, mouth, tongue, teeth, oesophagus, stomach, small and large intestine, anus, incisor, molar, premolar, canine, producer, consumer, predator, prey, apex predator, energy | Soluble, conductive, thermal, magnetic, dissolve, solution, mixture, substance, evaporate, sieve, filter, reversible, irreversible, fair test | Simple/series circuit, parallel circuit, voltage, components, brightness, volume, function, symbols |
| Term 2 Scientific Vocabulary | | Properties, suitable/ unsuitable, Squashed, twisted, bent, stretched | Question, answer, observe, equipment, identify, sort, group, compare, describe, measurements, test, results, diagram, chart | Skeleton, skull, bones, muscles, joint, nutrition, vitamins, minerals, fat, protein, carbohydrates, fibre, water, support, protection, movement | Vertebrate: fish, amphibian, reptile, bird, mammals, invertebrate: snails and slugs, worms, spiders, insects, classification, classification key, environment, habitat | Reflection, refraction, spectrum, shadow, light source, opaque | Scientist, theory, proof, evidence |

AAT Science Progression

| Term 1 | | | | | | | |
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| Term 1 Objectives | | <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock (include other bendy/stretchy materials)</p> <p>Describe the simple physical properties of a variety of everyday materials</p> <p>Distinguish between an object and the material from which it is made</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Identifying and classifying</p> | <p>Describe the simple physical properties of a variety of everyday materials</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses (floating/sinking)</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Identifying and classifying</p> | <p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>Describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p>Recognise that soils are made from rocks and organic matter.</p> <p>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>Identifying differences, similarities or changes related to simple scientific ideas and processes.</p> | <p>Identify the different types of teeth in humans and their simple functions</p> <p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> | <p>Compare and group together everyday materials on the basis that their properties including their hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets</p> <p>Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p>Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>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</p> <p>Using test results to make predictions to set up</p> | <p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>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</p> <p>Use recognised symbols when representing a simple circuit in a diagram</p> <p>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>Using test results to make predictions to set up further comparative and fair tests</p> <p>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</p> |

AAT Science Progression

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| | | | | | | <p>further comparative and fair tests</p> <p>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</p> <p>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> | |
| Term 1 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
| Concept question Term 1 | | How are _____ and _____ similar and different? | Which materials are best for making boats and why? | How do geologists identify, sort and classify rocks? | Why is each part of the digestive system so important? | Why can some scientific changes be described as reversible? | How can changing the components effect an electrical circuit? |
| Key concepts Cause and effect Connections Pattern Similarities and differences | | Compare and group things together based on their similarities and differences | Identify, classify and appropriately name materials based on their similarities and differences | Identify, classify and appropriately name non-living things. | Explain the functions of different aspects of a process and how they connect together. | Explain and give reasons for consequences of scientific processes, including reversible and irreversible changes. | Investigate and analyse in detail the immediate consequences of scientific processes. |
| Term 2 | | | | | | | |
| Term 2 Objectives | | <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> | <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely, using simple equipment</p> <p>Performing simple tests</p> <p>Identifying and classifying</p> <p>Using their observations and ideas to suggest answers to questions</p> | <p>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>Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Asking relevant questions and using different types of</p> | <p>Recognise that living things can be grouped in a variety of ways</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> | <p>Recognise that light appears to travel in straight lines</p> <p>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</p> <p>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</p> | <p>A study of famous scientific discoveries</p> <p>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</p> <p>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> |

AAT Science Progression

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| | | | Gathering and recording data to help in answering questions. | scientific enquiries to answer them. Using straightforward scientific evidence to answer questions or to support their findings | Asking relevant questions and using different types of scientific enquiries to answer them. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables | Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. 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 | |
| Term 2 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
| Concept question Term 2 | | Why is glass and not metal used for windows? (compare) | What do we mean by ‘simple test’ in science? | Convince me that humans and animals are similar. | Scientifically speaking, how can we group and classify living things? | How do we see things? | Select one great scientific discovery and discuss how this impacts on our lives today? |
| Key concepts Cause and effect Connections Pattern Similarities and differences | | Compare and group things together based on their similarities and differences | Observe basic patterns in the results of simple tests. | Identify and explain similarities and differences between humans and animals. | Identify and explain similarities and differences between humans and animals giving reasons for your classifications. . | Explain and give reasons for consequences of scientific processes | Explain how different scientific theories connect together and their ongoing impact. |

AAT Science Progression

| Terms 3/4 | | Amazing Discoveries | Under the Microscope | When in Rome | Raiders and Traders | Rainforest Realms | Earth and Space, the final frontier |
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| | YR | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
| Term 3 Unit of Study | Early Learning Goal The Natural World | Physics: Seasonal changes | Biology: Animals including humans NC obj Y1 | Biology: Plants | Physics: Electricity | Biology: Living things and their habitats NC obj Y5 & 6 | Physics: Earth and Space NC obj Y5 |
| Term 4 Unit of Study | Early Learning Goal The Natural World | Working scientifically | Biology: Animals including humans NC obj Y2 | Physics: Light | Physics: Sound | Biology: Evolution and inheritance NC obj Y6 | Physics: Forces and Magnets NC obj Y5 |
| Term 3 Scientific Vocabulary | | Season, summer, winter, autumn, spring, day, daytime, wind, rain, snow, hail, sleet, fog, sun, hot, warm, cold | fish, amphibian, reptile, bird, mammals, carnivore, herbivore, omnivore, head, nose, eyes, ear, neck, shoulder, arm, elbow, wrist, hand, back, chest, hip, leg, knee, ankle, foot, wing, beak, tail, fin, sight, smell, touch, taste, hearing | Roots, stem, trunk, leaves, flowers, function, support, reproduction, air, light, water, fertiliser, life cycle, nutrients, germination, transportation, seed formation, seed dispersal, pollination | Simple/ series circuit, electricity, appliances, battery/ cell, wire, switch, bulb, safety, buzzer, conductor, insulator, metal | Plants, animals, classifying, living, life process, characteristic, organism, micro-organism | Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune, moon, phases of the moon, solar system, spherical, axis of rotation, Star, constellation |
| Term 4 Scientific Vocabulary | | Question, answer, observe, equipment, identify, sort, group, compare, describe, measurements, test, results, diagram and chart | Offspring, grow, adults, survival, water, food, air, exercise, hygiene, nutrition, reproduce, eggs, chick, chicken, caterpillar, pupa, butterfly, spawn, tadpole, frog, lamb, sheep | Light, light source, reflect, shadow, blocked, solid, artificial, torch, candle, lamp, sunlight, opaque, transparent, translucent | Vibration, wave, volume, pitch, tone, insulation, patterns, fainter/ louder | Variation, inherit, evolution, environment, adapt, inhabit, identical, genetics, survival | Gravity, surface, force, effect, air resistance, accelerate, decelerate, water resistance, friction, lever, pulley, gears, Newtons |

AAT Science Progression

| Term 3 | | | | | | | |
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| Term 3 Objectives | | <p>Observe changes across the four seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions</p> | <p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p> <p>Identifying and classifying</p> <p>Using their observations and ideas to suggest answers to questions</p> | <p>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>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</p> <p>Investigate the way in which water is transported within plants</p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> | <p>Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>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</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors</p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> | <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p>Describe the life process of reproduction in some plants and animals.</p> <p>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</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p> <p>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</p> <p>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> | <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>Describe the movement of the Moon relative to the Earth</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Identifying scientific evidence that has been used to support or refute ideas or arguments</p> |

AAT Science Progression

| Term 3 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
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| Term 3 Concept Question | | How does the weather change throughout the year? | How can living things be grouped in different ways? | Scientifically speaking, why are insects and animals important to plants? | Why are components in an electrical circuit made from the materials they are? | Why do we classify plants and animals? | Convince me it is always sunny somewhere on Earth |
| Key concepts Cause and effect Connections Pattern Similarities and differences | | Observe and describe scientific connections in their world | Identify, classify and appropriately name living things based in their similarities and differences | Identify and describe connections in scientific processes linked to plants | Explain and give reasons for the immediate consequences of simple scientific processes. | Describe and explain similarities and differences in various life processes. | Analyse, explain and present patterns found in scientific enquiries. |
| Term 4 | | | | | | | |
| Term 4 Objectives | | <p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely, using simple equipment</p> <p>Performing simple tests</p> <p>Identifying and classifying</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions.</p> | <p>Notice that animals, including humans, have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> | <p>Recognise that they need light in order to see things and that dark is the absence of light</p> <p>Notice that light is reflected from surfaces</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Recognise that shadows are formed when the light from a light source is blocked by an opaque object</p> <p>Find patterns in the way that the size of shadows change.</p> <p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> | <p>Identify how sounds are made, associating some of them with something vibrating</p> <p>Recognise that vibrations from sounds travel through a medium to the ear</p> <p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Recording findings using simple scientific language, drawings, labelled</p> | <p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p>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</p> <p>Identifying scientific evidence that has been used to support or refute ideas or arguments</p> | <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> |

AAT Science Progression

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| | | | | | <div>diagrams, keys, bar charts, and tables</div> <div>Identifying differences, similarities or changes related to simple scientific ideas and processes</div> <div>Using straightforward scientific evidence to answer questions or to support their findings.</div> | | <div>Using test results to make predictions to set up further comparative and fair tests</div> |
| Term 4 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
| Term 4 Concept Question | | Why is observation so important in Science? | True or false- Food is the most important need for humans and animals. | Why does your shadow change length during the day? | How do we hear? | How and why do living things adapt over time (give examples)? | How do different forces impact on objects and people? |
| <div>Key concepts</div> <div>Cause and effect</div> <div>Connections</div> <div>Pattern</div> <div>Similarities and differences</div> | | <div>Observe basic patterns in the results of simple tests.</div> | <div>Describe cause and consequence over time in a basic scientific process.</div> | <div>Explain the immediate consequences of simple scientific processes.</div> | <div>Explain and give reasons for the immediate consequences of simple scientific processes.</div> | <div>Recognise and explain the connections between species over time.</div> | <div>Investigate and analyse in detail the immediate consequences of scientific processes.</div> |

AAT Science Progression

| Terms 5/6 Local study | | Who's the King of the Castle? | War and Peace | Postcards from the Seaside | Tudor Rose | Brilliant Building and Lovely Landscapes | It's a Smugglers Life for me |
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| | YR | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
| Term 5 | Early Learning Goal The Natural World | Biology: Plants NC obj Y1 | Biology: Living things and their habitats | Physics: Forces and Magnets | Chemistry: States of Matter | Biology: Animals including humans | Biology: Animals including Humans |
| Term 6 | | Biology: Plants NC obj Y2 | Biology: Living things and their habitats | Working Scientifically | Working Scientifically | Working Scientifically | Working Scientifically |
| Term 5 Scientific Vocabulary | | Deciduous, evergreen, tree, leaf, flower, blossom, petal, fruit, roots, stem, trunk, branches, leaf, bud | Habitats, micro habitats, leaf litter, shelter, seashore, woodland, meadow, hedgerow, pond, ocean, rainforest and pooter | Force, push, pull, open, surface, friction, magnet, magnetic, attract, repel, magnetic poles, north, south | Solids, liquid, gas, evaporation, condensation, particle, temperature, degrees Celsius freezing, heating, state, matter | Human, puberty, grow, development, gestation, baby, toddler, child, adolescent adult, elderly | Diet, exercise, drugs, lifestyle, health, circulatory system, heart, valve, blood, blood vessels, vein, artery, transport, oxygenated, deoxygenated |
| Term 6 Scientific Vocabulary | | Growth, germinate, light, temperature, reproduce, life cycle, seed, bulb | Living, dead, never alive, food, food chain, food source, sun, grass and healthy | Fair test, explanation, conclusion, prediction, classify, data, evidence, record, biology, air, light water, fertiliser, nutrients, soil | Comparative test, explanation, conclusion, prediction, data, evidence, secondary source, interpret, record, physics, light source, shadow, opaque, transparent, translucent | Insulator, comparative test, fair test, plan, accuracy, systematic, quantitative measurements, hypothesis, chemistry | Comparative test, fair test, plan, variables, measurements, accuracy, identify, systematic, quantitative measurements, refute, biology |

AAT Science Progression

| Term 5 | | | | | | | |
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| Term 5 Objectives | | <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees</p> <p>Observing closely, using simple equipment</p> <p>Identifying and classifying</p> | <p>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, and how they depend on each other</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Observing closely, using simple equipment</p> <p>Using their observations and ideas to suggest answers to questions</p> <p>Gathering and recording data to help in answering questions</p> | <p>Compare how things move on different surfaces</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p>Observe how magnets attract or repel each other and attract some materials and not others</p> <p>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</p> <p>Describe magnets as having two poles</p> <p>Predict whether two magnets will attract or repel each other, depending on which poles are facing</p> <p>Setting up simple practical enquiries</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> | <p>Compare and group materials together, according to whether they are solids, liquids or gases</p> <p>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)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>Identifying differences, similarities or changes related to simple scientific ideas and processes</p> | <p>Describe the changes as humans develop to old age</p> <p>Explain how bodies change as the get older (eg. Joints, bones, eye sight)</p> <p>Discuss the different phases of human life</p> <p>Understand how humans change over time</p> <p>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</p> | <p>Describe the ways in which nutrients and water are transported within animals, including humans</p> <p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Using test results to make predictions to set up further comparative and fair tests</p> |

AAT Science Progression

| Term 5 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
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| Term 5 Concept Question | | Why do all plants need roots? | What makes a pond a great habitat for many living things? | Why do magnets only attract certain materials? | Explain why evaporation is an important part of the water cycle. | True or false- you become more independent the older you get. | Convince me each part of the circulatory system is equally important. |
| Key concepts Cause and effect Connections Pattern Similarities and differences | | Compare and group things together based on their similarities and differences. | Identify and explore connections between various living things. | Explain the immediate consequences of simple scientific processes. | Describe cause and consequence over time in a basic scientific process. | Describe and explain similarities and differences in the human life cycle | Explain the function of different aspects of a process, how they connect together and their ongoing impact. |
| Term 6 | | | | | | | |
| Term 6 Objectives | | <p>Observe and describe how seeds and bulbs grow into mature plants</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>Performing simple tests</p> <p>Using their observations and ideas to suggest answers to questions</p> | <p>Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>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</p> <p>Asking simple questions and recognising that they can be answered in different ways</p> | <p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> | <p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> | <p>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Using test results to make predictions to set up further comparative and fair tests</p> <p>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</p> | <p>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Using test results to make predictions to set up further comparative and fair tests</p> <p>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</p> |

AAT Science Progression

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| | | | | <div>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</div> <div>Identifying differences, similarities or changes related to simple scientific ideas and processes</div> <div>Using straightforward scientific evidence to answer questions or to support their findings.</div> | <div>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</div> <div>Identifying differences, similarities or changes related to simple scientific ideas and processes</div> <div>Using straightforward scientific evidence to answer questions or to support their findings.</div> | <div>Identifying scientific evidence that has been used to support or refute ideas or arguments.</div> | <div>Identifying scientific evidence that has been used to support or refute ideas or arguments.</div> |
| Term 6 Key Concepts – the broadest and abstract concepts that transfer across the subject | | | | | | | |
| Term 6 Concept Question | | How can you help a plant to grow? | Explain what is meant by a food chain | How can we present the patterns we find in science? | How does a fair test provide scientific evidence? | What does a scientist need to do to spot scientific patterns? | Why is fair testing so important when analysing scientific patterns? |
| Key concepts Cause and effect Connections Pattern Similarities and differences | | Observe cause and consequence over time in a basic scientific process. | Describe cause and consequence over time in a basic scientific process. | Identify patterns from gathered data, using scientific evidence to explain findings. | Identify patterns from gathered data, using scientific evidence to explain findings. | Analyse, explain and present patterns found in scientific enquiries. | Analyse, explain and present patterns found in scientific enquiries. |