



## Science and the Foundation Stage

In Nursery and Reception Science links appear mainly in **Understanding the World: The Natural World**. The complete progression ladder can be found in the EYFS curriculum document and on the EYFS website page

| Nursery  | Reception   |
|--|---|
| <p>NW8: Responds to experiences and explorations of why things happen and how things work in the natural world.</p> <p>NW9: Looks closely at similarities, differences, patterns and change in own environment and that of others.</p> | <p>NW10: Drawing on practical experiences, books and personal observations, knows that living things live, grow and die.</p> <p>NW11: Choose to independently make observations of the natural world through comments/questioning, drawings and taking photographs</p> <p>NW12: Can make observations including making drawings of animals and plants.</p> <p>NW12: Can explain why some things naturally occur and talk about changes in the world around them</p> <p>ELG: Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <p>ELG: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p> |

Identified skills in **PSED - Managing Self** also support the development of Science


| Nursery | Reception  |
|---------|--|
|         | <p>MS10: Shows an awareness and understanding of the effect of what they eat on the body.</p> <p>MS11: Knows the importance of good health, and a healthy diet.</p> <p>MS11: Talks about ways to keep healthy and safe.</p> <p>ELG: Understand the importance of healthy food choices.</p> |

Skills in **Communication and Language** also support the development of Science

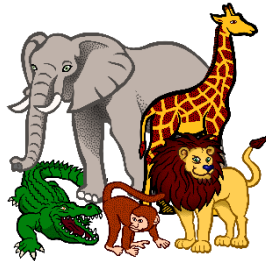


| Nursery  | Reception  |
|--|--|
| <p>LAU9 – Understand how and why questions</p>   | <p>LAU10 – Answers how and why questions about their experiences and in response to stories or events</p> <p>ELG: Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions.</p> |
| <p>S8 – Describe events that have already happened although tenses may not be accurate</p> | <p>S10 – In a range of situations begins to offer their ideas and simple explanations</p> <p>ELG - Offer explanations for why things might happen, making use of recently introduced vocabulary</p>  |




**YEAR ONE SCIENCE CURRICULUM**

|   |  |   |
|---|--|---|
|  | <p>measure, observe, compare, measurement, growth, trowel, temperature, bend, squash, twist, stretch, absorb</p> | <p align="center"><b>Exposure words</b></p> <p>draw, label, change, same, table, record, tally, pipette, size, predict, similar, different, sort, group, identify, pattern, height, number, amount, hand lens, ruler, counting cubes, centimetres, meters, suitable, unsuitable, match, test, scientific enquiry, comparative test, research, pattern seeking</p> |
|---|--|---|




| <b>1</b>            | <b>Autumn 1</b>  |  | <b>Autumn 2</b>   |  | <b>Spring 1</b>  |  |
|---------------------|--|--|---|--|--|--|
|                     | <b>Human Body</b>  | <b>Seasonal Changes</b>  | <b>Materials</b>  | <b>Planting</b>  | <b>Seasonal Changes</b>  |  |
| <b>Key Learning</b> | <p>Can we identify and name parts of the human body?<br/>                     Can we label parts of the human body?<br/>                     Can we investigate sight?<br/>                     Can we investigate sound?<br/>                     Can we investigate taste?<br/>                     Can we investigate touch?<br/>                     Can we investigate smell?</p> | <p>Can I recognise changes in Autumn?<br/>                     Can I recognise changes in Winter?</p>  | <p>Can I explore different materials?<br/>                     What is melting and freezing?<br/>                     What objects sink and float?<br/>                     Which materials absorb water?</p> | <p>What equipment do we need to plant seeds?</p>   | <p>Can I recognise changes in Spring?</p>  |  |
| <b>Skills</b>       | <p>Asking simple questions<br/>                     Using their observations and ideas to suggest answers to questions<br/>                     Performing simple tests</p>  | <p>Asking simple questions<br/>                     Gathering and recording data</p>   | <p>Identifying and classifying<br/>                     Observing closely, using simple equipment<br/>                     Performing simple tests<br/>                     Gathering and recording data</p>  | <p>Asking simple questions<br/>                     Observing closely<br/>                     Using simple equipment</p>  | <p>Asking simple questions<br/>                     Gathering and recording data</p>   |  |
| <b>Vocabulary</b>   | <p>hair, eyes, face, nose, ears, teeth, mouth, head, neck, arm, elbow, hand, leg, knee, foot<br/>                     light, dark, blind, hear, loud, quiet, noisy, sweet, salty, sour, bitter, savoury, skin, rough, smooth, hard, soft, smell, scent, sniff, stench</p>  | <p>autumn, daylight, night, weather, season, rainfall, weather, rain gauge, winter, rainy, snowy, windy, cloudy, frosty, sunny, spring, summer</p> | <p>material, shiny, dull, rock, heavy, light, object, wood, metal, plastic, glass, wool, solid, liquid, melt, freeze, ice, float, sink, absorb, transparent, opaque</p>                                       | <p>plant, flower, leaf, petals, stem, roots, branch, trunk, roots, wildflower, daisy, garden plant, sunflower, nettle, buttercup, dandelion, deciduous tree, horse chestnut, oak, sycamore, evergreen tree, pine, holly, needles, seed, soil, growth</p> | <p>autumn, daylight, night, weather, season, rainfall, weather, rain gauge, winter, rainy, snowy, windy, cloudy, frosty, sunny, spring, summer</p> |  |

| 1            | Spring 2  | Summer 1   | Summer 2   |
|--------------|---|--|--|
|              | Animals   | Plants   | Seasonal Changes   |
| Key Learning | <p>What is a mammal?<br/>           Can I compare and group animals?<br/>           What are carnivores?<br/>           What are herbivores?</p>  | <p>What are the parts of a plant?<br/>           What are parts of a tree?<br/>           What is the difference between wildflowers and garden flowers?<br/>           What are deciduous trees?<br/>           What are evergreen trees?<br/>           What trees are in my local area?</p> | <p>Can I recognise changes in Summer?</p>  |
| Skills       | <p>Asking simple questions<br/>           Gathering and recording data<br/>           Identifying and classifying<br/>           Using their observations and ideas to suggest answers to questions</p>   | <p>Identifying and classifying<br/>           Observing closely, using simple equipment.<br/>           Gathering and recording data<br/>           Using their observations and ideas to suggest answers to questions.</p>  | <p>Asking simple questions<br/>           Gathering and recording data</p>   |
| Vocabulary   | <p>animal, mammal, fur, wild mammal, pet, bird, wings, beak, feathers, webbed feet, flippers, tail, fins, scales, gills, amphibian, frog, toad, newt, reptile, lizard, crocodile, turtle, carnivore, sharp teeth, herbivore, plants, vegetable, fruit, omnivore</p> | <p>plant, flower, leaf, petals, stem, roots, branch, trunk, roots, wildflower, daisy, garden plant, sunflower, nettle, buttercup, dandelion, deciduous tree, horse chestnut, oak, sycamore, evergreen tree, pine, holly, needles, seed, soil, growth</p>                                       | <p>autumn, daylight, night, weather, season, rainfall, weather, rain gauge, winter, rainy, snowy, windy, cloudy, frosty, sunny, spring, summer</p> |
|              |    |    |   |

**YEAR TWO SCIENCE CURRICULUM**

|   |  |   |
|---|--|---|
|  | <p>measure, observe, compare, measurement, growth, trowel, temperature, bend, squash, twist, stretch, absorb</p> | <p align="center"><b>Exposure Words</b></p> <p>draw, label, change, same, table, record, tally, pipette, size, predict, similar, different, sort, group, identify, pattern, height, number, amount, hand lens, ruler, counting cubes, centimetres, meters, suitable, unsuitable, match, test, scientific enquiry, comparative test, research, pattern seeking</p> |
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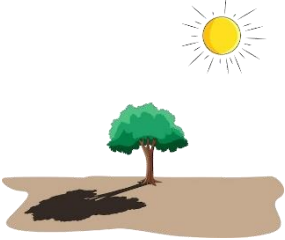
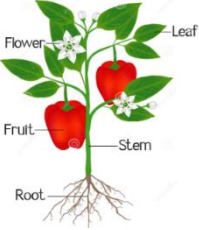

| <b>2</b>            | <b>Autumn 1</b>  |  | <b>Autumn 2</b>  | <b>Spring 1</b>   |
|---------------------|--|--|--|---|
|                     | <b>Animal's needs for survival</b>   | <b>Humans</b>  | <b>Materials</b>   | <b>Plants Light and Dark</b>  |
| <b>Key Learning</b> | <p>What is a mammal?<br/>                     What do birds need to survive?<br/>                     What do fish need to survive?<br/>                     What do amphibians need to survive?<br/>                     What do reptiles need to survive?<br/>                     What do humans need to survive?</p> | <p>Why is exercise important?<br/>                     Why do we need a balanced diet?<br/>                     What is good hygiene?<br/>                     How do we look after our teeth?</p> | <p>Can we explore different materials?<br/>                     Why are some objects made from different materials?<br/>                     Can I test different materials – bend, twist, squash and stretch<br/>                     Which materials are waterproof?</p> | <p>What are the parts of a plant?<br/>                     What do plants need to grow?</p>   |
| <b>Skills</b>       | <p>Ask questions<br/>                     Gather, record and classify data<br/>                     Answer questions and make conclusions</p>  | <p>Gather record and classify data<br/>                     Make observations</p>  | <p>Make observations<br/>                     Gather record and classify data<br/>                     Ask questions<br/>                     Take measurements<br/>                     Answer questions and make conclusions</p>   | <p>Ask questions<br/>                     Make observations<br/>                     Take measurements<br/>                     Answer questions and make conclusions</p> |
| <b>Vocabulary</b>   | <p>shelter, heart, exercise, physical health, mental health, healthy diet, unhealthy diet, meat, sugar, germs, hygiene, doctor, disease, plaque, gums, filling</p>   | <p>natural material, human-made material, recycle, flexible, rigid, stone, pebble, brick, brittle, flexible, translucent, tough, lightweight, strong, breakable, waterproof</p>                    | <p>sunlight, compost, herb, blossom, bulb, shoot</p>   |   |

| 2            | Spring 2  | Summer 1  | Summer2   |
|--------------|---|---|---|
|              | Living things and their habitats  | Plants Bulbs and Seeds  | Growing up  |
| Key Learning | <p>What is a habitat?<br/>           What is a polar habitat like?<br/>           What is a desert habitat like?<br/>           What is an ocean habitat like?<br/>           What is a woodland habitat like?<br/>           What is a microhabitat?<br/>           What is a food chain?<br/>           What has been alive, dead or never alive?</p> | <p>What is a seed?<br/>           What is a bulb?<br/>           What do plants need to grow?<br/>           How do bulbs and seeds change over time?</p> | <p>What is the difference between parent and offspring?<br/>           What is the life cycle of a human?<br/>           What is the life cycle of a different mammals?<br/>           What is the life cycle of an amphibian?<br/>           What is the life cycle of a butterfly?<br/>           Are there patterns between life cycles?</p> |
| Skills       | <p>Gather, record and classify data<br/>           Answer questions and make conclusions<br/>           Make observations</p>   | <p>Ask questions<br/>           Make observations<br/>           Take measurements<br/>           Answer questions and make conclusions</p>               | <p>Gather, record and classify data<br/>           Ask questions<br/>           Make observations<br/>           Answer questions and make conclusions</p>  |
| Vocabulary   | <p>Arctic plants, hibernate, habitat, cactus, desert, rainfall, ocean, seagrass, woodland, fern, moss, microhabitat, spider, snail, diet, food chain, living, dead, never alive</p>   | <p>sunlight, compost, herb, blossom, bulb, shoot</p>  | <p>offspring, egg, parent, baby, child, teenager, life cycle, adolescent, frogspawn, tadpole, froglet, caterpillar, pupa, butterfly, insect, adult</p>  |
|              |    |    |    |

**YEAR THREE SCIENCE CURRICULUM**

|  |  |   |
|--|--|---|
|  | <p>hardness, reaction, bar chart, pictogram, data, increase, decrease, prediction, dissection, scales, filter paper, filter funnel, measuring cylinder, thermometer, conclusion, evaluation, data, volume, decibel, meter, stopwatch, beaker, temperature, Petri dish, block chart, bar graph, classifying, classification key</p> | <p align="center">Exposure words</p> <p>fair test, identify, group and classify, model, modelling, investigate, changed, measured, stayed the same, millimetres, millilitres, data logger, tape measure, features, scientists, diagram, sorting diagram, block diagram, distance, results</p> |
|--|--|---|

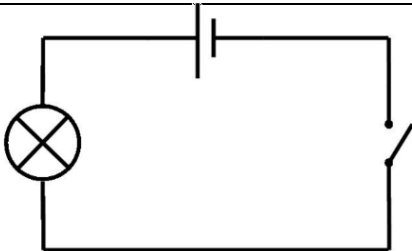
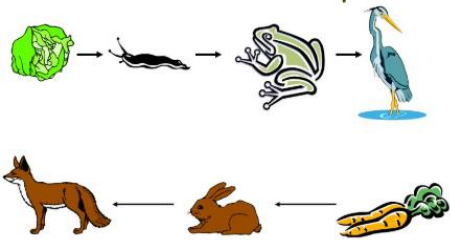

| <b>3</b>            | <b>Autumn 1</b>   | <b>Autumn 2</b>   |  | <b>Spring 1</b>  |
|---------------------|---|---|--|--|
|                     | <b>Skeletons and movement</b>   | <b>Nutrition and diet</b>   | <b>Rocks</b>   | <b>Fossils and soils</b>   |
| <b>Key Learning</b> | <p>Can I identify and name bones?<br/>           What are the functions of the skeleton?<br/>           Can I identify and name bones in different animals?<br/>           Can I name animals with and without a spine?<br/>           Are all skeletons the same?<br/>           What are joints?<br/>           How do we move?</p> | <p>What are food groups?<br/>           Do I know the 5 different food groups?<br/>           Why do we need a balanced diet?<br/>           Can I compare diets?<br/>           Do all animals have the same diet?</p> | <p>Can I identify rocks?<br/>           Can I group rocks?<br/>           Can I test rocks?<br/>           Can I carry out a local rock survey?</p>  | <p>Can I explore fossils?<br/>           How are fossils formed?<br/>           Can I explore soils?<br/>           Why is soil important?</p>                                     |
| <b>Skills</b>       | <p>Ask questions<br/>           Gather, record and classify data<br/>           Present findings<br/>           Answer questions and make conclusions</p>   | <p>Gather, record and classify data<br/>           Present findings<br/>           Ask questions</p>  | <p>Make observations<br/>           Gather, record and classify data</p>   | <p>Ask questions<br/>           Present findings<br/>           Gather and classify data<br/>           Take measurements<br/>           Answer questions and make conclusions</p> |
| <b>Vocabulary</b>   | <p>skeleton, skull, ribcage, pelvis, femur, spine, antennae, exoskeleton, joint, hinge joint, ball-and-socket joint, muscle, biceps, triceps, contract, relax</p>   | <p>carbohydrates, proteins, dairy products, fats, fruit and vegetables, balanced diet, balanced meal, nutrition, Eatwell Guide, vegan diet, vegetarian diet, omnivorous diet, pescatarian diet</p>                      | <p>granite, pumice, sandstone, chalk, marble, gneiss, crystals, grains, layers, texture, hardness, weathering, fossil, shell, fossilisation, sediment, sandy soil, clay soil, peat soil, chalky soil, organic matter, nutrients, deforestation, habitat loss</p> |  |

| 3   | Spring 2  | Summer 1   | Summer 2   |  |
|---|---|--|--|--|
|   | Light   | Plants   | Forces   | Magnets  |
| Key Questions   | <p>What are light sources?<br/>           Why is the sun important?<br/>           How do we see?<br/>           What causes shadows?<br/>           What is opaque, translucent and transparent?</p> | <p>What are the parts of a plant and their function?<br/>           Can I dissect a plant?<br/>           What do plants need for healthy growth?<br/>           What is the stem and how is water transported?<br/>           What is a seed?<br/>           What parts of a plant help it reproduce?<br/>           What is pollination?<br/>           How are seeds dispersed?<br/>           What is a life cycle of a plant?</p> | <p>Can I explore forces?<br/>           What is friction?</p>  | <p>What is a magnet?<br/>           Which materials are magnetic and non-magnetic?<br/>           What is the north pole and south pole on a magnet?</p> |
| Skills  | <p>Make observations<br/>           Gather, record and classify data<br/>           Ask questions<br/>           Plan<br/>           Answer questions and make conclusions</p>                        | <p>Answer questions and make conclusions<br/>           Gather, record and classify data<br/>           Ask questions<br/>           Plan<br/>           Make observations<br/>           Present findings</p>   | <p>Make observations<br/>           Answer questions and make conclusions<br/>           Plan<br/>           Present findings</p>            |  |
| Vocabulary  | <p>light sources, natural light sources, artificial light sources, Sun, sunglasses, protect, reflection, shadow</p>   | <p>water transportation, seedling, seed coating, germination, stamen, pistil, pollen, reproductive organs, pollination, pollinators, wind dispersal, animal dispersal, water dispersal, explosion dispersal, seed dispersal</p>  | <p>push, pull, force, contact force, friction, magnet, magnetic, poles, magnetic force, non-metal, iron, aluminum, steel, attract, repel</p> |  |
|  |   |   |   |  |


**YEAR FOUR SCIENCE CURRICULUM**

|  |  |  |
|--|--|--|
|  | <p>hardness, reaction, bar chart, pictogram, data, increase, decrease, prediction, dissection, scales, filter paper, filter funnel, measuring cylinder, thermometer, conclusion, evaluation, data, volume, decibel, meter, stopwatch, beaker, temperature, Petri dish, block chart, bar graph, classifying, classification key</p> | <p align="center"><b>Exposure words</b></p> <p>fair test, identify, group and classify, model, modelling, investigate, changed, measured, stayed the same, millimetres, millilitres, data logger, tape measure, features, scientists, diagram, sorting diagram, block diagram, distance, results</p> |
|--|--|--|

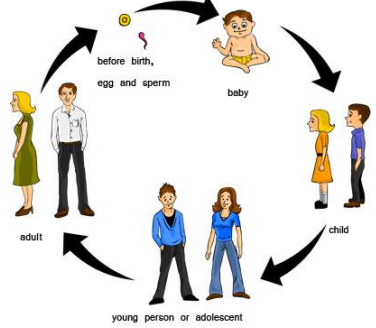
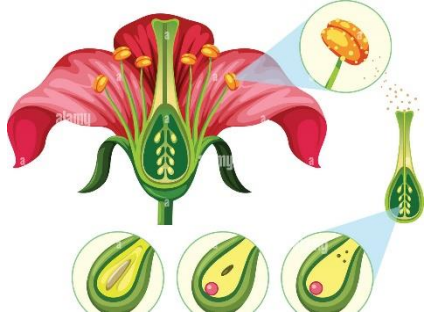
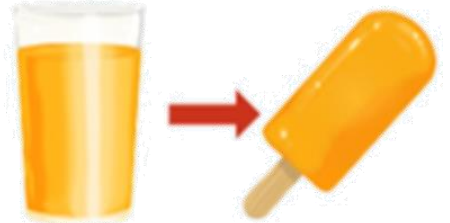
| <b>4</b>            | <b>Autumn 1</b>   |  | <b>Autumn 2</b>   | <b>Spring 1</b>  |
|---------------------|---|--|---|--|
|                     | <b>Grouping and Classifying</b>   | <b>Data Collection</b>                             | <b>States of Matter</b>   | <b>Sound</b>   |
| <b>Key Learning</b> | <p>How can animals be grouped?<br/>What are vertebrates and invertebrates?<br/>What are classification keys?<br/>How can plants be grouped?<br/>Can I use a classification key?</p> | <p>Can I collect data?<br/>Can I analyse data?</p> | <p>What are solids, liquids and gases?<br/>Why are some materials difficult to categorise?<br/>How can solids, liquids and gases change state?<br/>Which materials melt?<br/>What is the water cycle?</p> | <p>What are vibrations?<br/>How does the ear work?<br/>Can I investigate sounds?<br/>Can I explore volume?<br/>Can I explore pitch?</p>                    |
| <b>Skills</b>       | <p>Gather, record and classify data<br/>Ask questions<br/>Present findings</p>  | <p>Gather, record and classify data</p>            | <p>Gather, record and classify data<br/>Make observations<br/>Ask questions<br/>Plan<br/>Answer questions and make conclusions</p>  | <p>Ask questions<br/>Gather, record and classify data<br/>Make observations<br/>Plan<br/>Answer questions and make conclusions</p>                         |
| <b>Vocabulary</b>   | <p>vertebrate, invertebrate, soft bodied invertebrate, flowering plant, non-flowering plant, seasonal changes, natural resources, rewilding, nature reserve,</p>                    |  | <p>solid, liquid, gas, states of matter, pouring solid, ooblek, flow, freezing, melting, boiling, condensation, evaporation, melting point, water cycle, precipitation, atmosphere, petri dish</p>        | <p>vibration, sound, volume, pitch, outer ear, ear bones, cochlea, ear drum, ear canal, decibel, insulate, high-pitched, low-pitched, background noise</p> |

| 4            | Spring 2  | Summer 1  |  | Summer 2   |
|--------------|---|---|--|--|
|              | Electricity   | Data Collection   | Habitats and food chains   | Digestive System   |
| Key Learning | <p>What appliances use electricity?<br/>           How do I build and draw series circuits?<br/>           What has gone wrong with a circuit?<br/>           What are conductors and insulators?<br/>           What materials are conductors or insulators of electricity and is there a pattern?</p> | <p>Can I collect data?<br/>           Can I analyse data?</p> | <p>Can I identify living things and their habitats?<br/>           Can I classification keys to sort animals?<br/>           Can I use classification keys to sort plants?<br/>           What impact do humans have on habitats?<br/>           What is a food chain?<br/>           Can I interpret a food chain?<br/>           Can I draw a food chain?<br/>           What would happen if an element in the food chain were to change?</p> | <p>How do omnivores, carnivores and herbivores teeth differ?<br/>           What teeth do humans have?<br/>           What are the layers of a tooth?<br/>           What is the digestive system?<br/>           What are the organs in the digestive system?</p> |
| Skills       | <p>Gather, record and classify data<br/>           Answer questions and make conclusions<br/>           Ask questions</p>   | <p>Gather, record and classify data</p>                       | <p>Ask questions<br/>           Gather, record and classify data<br/>           Present findings<br/>           Answer questions and make conclusions<br/>           Present findings</p>  | <p>Make observations<br/>           Ask questions<br/>           Plan<br/>           Gather, record and classify data<br/>           Present findings<br/>           Answer questions and make conclusions</p>   |
| Vocabulary   | <p>appliances, plug, socket, cell, electrocuted, circuit, switch, battery, buzzer, conductor, insulator</p>   |   | <p>vertebrate, invertebrate, softbodied invertebrate, flowering plant, non-flowering plant, seasonal changes, natural resources, rewilding, nature reserve, producer, consumer, prey, predator, farming, overfishing, hunting</p>  | <p>incisors, canines, premolars, molars, enamel, root, decay, digestive system, mouth, oesophagus, stomach, small intestine, large intestine, rectum, saliva</p>   |
|              |    |   |    |   |


**YEAR FIVE SCIENCE CURRICULUM**

|   |   |  |
|---|---|--|
|  | <p>causal relationships, decimals, analyse, interpret, conclude, capacity, mass, approximate, justify, secondary source, evidence, duration, mean, calculate, method line graph, microscope, anomaly, anomalous result, control, control beaker, sieve, filtering, repeatability, accuracy, correlation, precision, angle, periscope, line graph, scatter graph, independent variable, dependent variable, controlled variables, duration, theory</p> | <p align="center"><b>Exposure words</b></p> <p>causal relationships, decimals, analyse, interpret, conclude, capacity, mass, approximate, justify, secondary source, evidence, duration, mean, calculate, method</p> |
|---|---|--|


| <b>5</b>            | <b>Autumn 1</b>  | <b>Autumn 2</b>  | <b>Spring 1</b>  |
|---------------------|--|--|--|
|                     | <b>Forces</b>  | <b>Space</b>   | <b>Materials</b>   |
| <b>Key Learning</b> | <p>What is friction?<br/>           What is air resistance?<br/>           What is water resistance?<br/>           Can I explore gravity?<br/>           How can we use small forces for greater effects?</p> | <p>What is the solar system?<br/>           What planets make up the solar system?<br/>           What is the motion of the Earth and planets?<br/>           What do we know about planet Earth?<br/>           How do we get night and day?<br/>           What is the moon?</p> | <p>Can we test materials for magnetic, transparency and hardness?<br/>           Can we test materials for electrical conductivity?<br/>           What is a good insulator?<br/>           What are the uses of every day materials?</p>                        |
| <b>Skills</b>       | <p>Present findings<br/>           Plan<br/>           Take measurements<br/>           Answer questions and make conclusions</p>  | <p>Answer questions and make conclusions<br/>           Present findings<br/>           Gather, record and classify data</p>   | <p>Gather, record and classify data<br/>           Plan<br/>           Take measurements<br/>           Evaluate<br/>           Answer questions and make conclusions</p>  |
| <b>Vocabulary</b>   | <p>frictional force, motion, air resistance, parachute, surface area, water resistance, streamlined, non-contact force, gravity, weight, lever, gear, pulley, machine</p>                                      | <p>Solar System, orbit, Sun, planets, Pluto, celestial body, gravity, heliocentric model, geocentric model, rotate, axis, North Pole, South Pole, Earth, night, day, moon, gravitational force, satellite</p>  | <p>electrical conductor, electrical insulator, thermal insulator, properties, lifespan, dissolve, soluble, insoluble, solution, mixture, reversible changes, reverse, chemical reaction, irreversible change, burning, heating, vinegar, bicarbonate of soda</p> |

| 5            | Spring 2   |             | Summer 1  | Summer 2  |
|--------------|--|-------------|---|---|
|              | Animals including humans   | Life cycles | Reproduction  | Reversible and Irreversible changes   |
| Key Learning | What is the human life cycle?<br>What are the parts of the human life cycle:<br>Babies and children<br>Adolescence and puberty<br>Adults and elderly<br>What are gestation periods of mammals? |             | What is sexual reproduction?<br>What are the reproductive parts of a plant?<br>What is pollination?<br>What is asexual reproduction?<br>What is cloning?  | What is dissolving?<br>Can I separate materials by filtering and sieving?<br>What are solutions?<br>What are reversible changes?<br>What are irreversible changes?  |
| Skills       | Plan<br>Gather, record and classify data<br>Answer questions and make conclusions<br>Present findings  |             | Present findings<br>Gather, record and classify data<br>Answer questions and make conclusions<br>Plan<br>Take measurements  | Evaluate<br>Gather, record and classify data<br>Take measurements<br>Present findings<br>Evaluate   |
| Vocabulary   | foetus, elderly adult, milestone, womb, period, reproduce, hormone, puberty, life expectancy, gestation period, gestation  |             | monotreme, mammary gland, metamorphosis, larva, chrysalis, hatchling, nestling, fledgling, fertilisation, embryo, sperm cells, egg cells, sexual reproduction, anther, stigma, style, filament, ovary, ovule, clone, runner, tuber, asexual reproduction, cutting, parent plant | electrical conductor, electrical insulator, thermal insulator, properties, lifespan, dissolve, soluble, insoluble, solution, mixture, reversible changes, reverse, chemical reaction, irreversible change, burning, heating, vinegar, bicarbonate of soda |
|              |   |             |   |    |

**YEAR SIX SCIENCE CURRICULUM**

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|---|--|---|
|  | <p align="center">causal relationships, decimals,<br/>analyse, interpret, conclude, capacity, mass, approximate, justify, secondary source,<br/>evidence, duration, mean, calculate, method line graph, microscope, anomaly, anomalous<br/>result, control, control beaker, sieve, filtering, repeatability, accuracy, correlation, precision,<br/>angle, periscope, line graph, scatter graph, independent variable,<br/>dependent variable, controlled variables, duration, theory</p> | <p align="center"><b>Exposure words</b><br/>causal relationships, decimals, analyse,<br/>interpret, conclude, capacity, mass,<br/>approximate, justify, secondary source,<br/>evidence, duration, mean, calculate,<br/>method</p> |
|---|--|---|

| <b>6</b>            | <b>Autumn 1</b>  | <b>Autumn 2</b>  | <b>Spring 1</b>  |
|---------------------|--|--|--|
|                     | <b>Living things &amp; Habitats</b>  | <b>Electricity</b>   | <b>Light</b>   |
| <b>Key Learning</b> | <p>What conditions do living things need?<br/>How are living things classified?<br/>How and why do we classify living things?<br/>How are specific characteristics of living things used in classification?<br/>What is a micro organism?<br/>How are micro-organisms classified?<br/>Who was Carl Linneaus?</p> | <p>How is a circuit constructed?<br/>What is a complete and incomplete circuit?<br/>How do components in a circuit function?</p> | <p>How do we see?<br/>What can you tell me about light and straight lines?<br/>How are shadows formed?<br/>Investigation<br/>What is refraction?</p> |
| <b>Skills</b>       | <p>Answer Questions<br/>Draw Conclusions<br/>Gather, record &amp; classify data<br/>Present findings</p>   | <p>Gather, record &amp; classify data<br/>Present findings<br/>Plan<br/>Take Measurements<br/>Evaluate</p>                       | <p>Answer Questions<br/>Draw Conclusions<br/>Gather, record &amp; classify Plan<br/>Take Measurements</p>  |
| <b>Vocabulary</b>   | <p>organism, excretion,<br/>reproduction, mollusc, arachnid,<br/>classification, coniferous tree,<br/>microorganism, bacteria, virus,<br/>fungi, characteristics</p>   | <p>series circuit, voltage, current, complete<br/>circuit, incomplete circuit</p>  | <p>retina, iris, pupil, lens, ray diagram, solar<br/>eclipse, refraction, medium,<br/>rainbow, prism, coloured filter, spectrum of<br/>light</p>     |

| 6   | Spring 2   | Summer 1  | Summer 2  |
|---|--|---|---|
|   | Circulatory System   | Evolution and Inheritance   | Part of SRE - Diet, Drugs and Lifestyle   |
| Key Learning  | <p>What is the circulatory system?<br/>           What is blood and why do we need it?<br/>           How does the heart work?</p>   | <p>Variation<br/>           Adaptation<br/>           Fossils</p>   | <p>Why is diet important?<br/>           What effect do drugs have on us?</p>   |
| Skills  | <p>Ask Questions<br/>           Answer Questions<br/>           Draw Conclusions<br/>           Make observations<br/>           Present Findings<br/>           Evaluate</p>  | <p>Gather, record &amp; classify data<br/>           Answer Questions<br/>           Make Conclusions<br/>           Plan<br/>           Present Findings</p>   | <p>Answer Questions<br/>           Make Conclusions<br/>           Plan<br/>           Take Measurements<br/>           Evaluate</p>                            |
| Vocabulary  | <p>circulatory system,<br/>           blood vessels, arteries, veins,<br/>           capillaries, red and white blood cells, lungs,<br/>           plasma, oxygen, atria, ventricles,<br/>           de/oxygenated blood</p> | <p>variation, species, inheritance, desirable characteristics, polar habitat, desert habitat, adaptations, evolution, common ancestor, natural selection, finch, Galapagos Islands, decompose, Charles Darwin, palaeontologist, Mary Anning</p> | <p>calories, un/saturated fats, trans fats, drug, painkiller, depressant, stimulant, cigarette, tar, nicotine, vape, carbon monoxide, addiction, heart rate</p> |
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