Brompton and Sawdon CP Whole School Science Curriculum

Rationale

- It is our duty at Brompton & Sawdon CP, as a mainstream school, to provide a curriculum that is **ambitious** and **challenging** for **all** learners (where practical).
- This curriculum must fulfil the requirements set out in the **National Curriculum**. However, at Brompton, we go **beyond** these expectations, delivering a **deep**, as well as a **broad and balanced**, curriculum, which also reflect the needs, **rural context** and interests of our pupils.
- Whilst it is important that students have the opportunity to experience this depth of learning and experience their year group's curriculum and expectations, this should not be at the expense of **mastery** and **long-term retention**.
- When a student has not mastered a year group's curriculum, it is important that leaders and teachers **adapt** their curriculum, resources and practice. This may require teachers to 'secure' previous year group's expectations.
- At Brompton & Sawdon CP we firmly believe that **mixed-aged classes** are a benefit and not a necessity or hindrance; they allow students to progress at their own rate, whether that is allowing students to build on their strengths and looking at the next years' curricula or allowing students the time and support to secure understanding of previous year groups' curricula.
- We recognise, at Brompton, that students' **starting points** and previous educational experiences vary significantly. Our curriculum allows all students, especially the **disadvantaged**, to achieve their potential.

The following whole-school Science curriculum reflects the above rationale. It also sets out how Brompton & Sawdon CP plan for and deliver (and go beyond) the National Curriculum. This is a 'working document'; teachers and leaders adapt the following based on the *'impact'* on students.

This plan outlines what is taught (Intent), as well as when, where, why, how it is taught (Implementation). It breaks down the school's Science curriculum into each dimension of the subject and then by year group. This allows teachers to clearly see the progression and sequence that skills need to be taught, so they can adapt their practice (if required). (The WORKING SCIENTIFICALLY element of the Science curriculum is woven into the other dimensions of the curriculum.)

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SCIENCE - WORKING SCIENTIFICALLY - Years 1-6

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 1 and 2 Students will: • Ask simple questions and recognising that they can be answered in different ways • Observe closely, using simple equipment • Perform simple tests • Identify and classifying • Use their observations and ideas to suggest answers to questions • Gather and recording data to help in answering questions.	Year 1 Use all types of investigation to explore learning. Identifying and grouping of materials for a purpose - e.g. choosing the best material for bridge building. Researching - e.g. planets, the solar system, animals, plants and habitats. Observing changes over time - e.g. the changes to our forest during forest schools. Performing simple tests - e.g. STEM colour walking Year 2 Making constructions using different materials to assess the most appropriate material choice. Identified and classified the most appropriate material when met with an external force. Made adjustments to the structures following identification of weaknesses in structures. Collated data to show which were most and least effective.
Year 3 and 4 Students will: • Ask relevant questions and using different types of scientific enquiries to answer them • Set up simple practical enquiries, comparative and fair tests	Year 3 Use fair testing to assess the strengths of structures, strengths and weaknesses of magnets. Compile data to show findings following scientific questioning. Follow systematic processes to gather data and evidence. Effective use of language, labelling and drawing. Create wind charms to identify changes in the weather and accurately record findings.

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• Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • Gather, recording, classifying and presenting data in a variety of ways to help in answering questions • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identify differences, similarities or changes related to simple scientific ideas and processes • Use straightforward scientific evidence to answer questions or to support their findings.	<u>Year 4</u> Different enquiry types used with accurate data log measurements: • Observation over time (egg investigation into tooth decay) • Pattern seeking (parachute size linked to effectiveness) • Identify, classify and group (classification of sweets, butterflies and birds) • Comparative and fair testing (insulating cups of hot/cold water with different materials) Accurate measurements represented through data handling techniques (excel spreadsheet to analyse different animal gestation periods) Label electrical diagrams of circuits built Use of STEM display to ask questions, conclude and follow up.
<u>Year 5 students will:</u> • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • Take measurements, using a range of scientific equipment, with increasing accuracy and precision • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs • Use test results to make predictions to set up further comparative and fair tests	Controlling variables (e.g. insulation of hot and cold water through different materials) Stopwatch, data loggers, video and measuring containers used. Classifying of sweets, butterflies and birds through classification keys. Label electrical diagrams with correct/recognised symbols. Using graphs (e.g. through Excel spreadsheet, comparing the size of an animal to the gestation period) Use of STEM display to ask questions, conclude and follow up and to support writing/presentation of results.

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• Report and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations • Identify scientific evidence that has been used to support or refute ideas or arguments.	Space - Copernicus and Galileo's impact on our understanding of Earth and Space.
Year 6 students will: • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • Take measurements, using a range of scientific equipment, with increasing accuracy and precision • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs • Use test results to make predictions to set up further comparative and fair tests • Use simple models to describe scientific ideas • Report and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations • Identify scientific evidence that has been used to support or refute ideas or arguments.	See above.
Year 6 students at Greater Depth will:	

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IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - SEASONAL CHANGES - Year 1 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 1 Students will: • Observe changes across the 4 seasons • Observe and describe weather associated with the seasons and how day length varies.	Constant discussions of changes in weather and seasons. Look at the changes of our forest during forest schools - bulbs and daffodils, wild flowers, blossom, autumn leaves and changes to the trees. Learning the 4 seasons through direct teaching and continually changing seasonal posters within the classroom.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

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SCIENCE - PLANTS - Years 1 - 3

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 1 Students will: • 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	Teaching of plants and flora through forest schools. Growing bulbs/plants in the front garden - part of William Wordsworth birthday celebration. Observing over time the growth of seeds/beans in the classroom - growing a garlic using a garlic bulb. Explicit teaching of the parts of the growing plant - roots, stem, flower. Drawing wildflowers from the surrounding village through Art and Design.
Year 2 Students will: • 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.	Experiment on growing cress seeds in different conditions. Recording the findings. Exploring the variables of light, water and heat.
Year 3 Students will: • Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	Explicit teaching of the parts of a plant. Teaching of plants through forest schools. Labelling and describing the functions of different parts of a plant. Taught, experimented and discussed the way water is necessary and cultivated within plants.

• 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.	Work done on seed dispersal.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - ANIMALS INCLUDING HUMANS - Years 1 - 6

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 1 Students will: • 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.	Class topics which focus on animals - Land ahoy, Mad about mini-beasts, Spring watch, Hibernation station and Walking with dinosaurs. Learning about animals through animal visits - visits to the farm during lambing season. Visit to the zoo. Spring watch topic - looking after lambs for the day - feeding and caring for the lambs. Visits to our school from the local vet accompanied by a selection of animals including snakes, lizards and tarantulas. STEM Home learning challenge - creating moving models to represent parts of our body.

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	Drawing and labelling our bodies. Walking with dinosaurs - exploring herbivores, omnivores and carnivores. PE - Using our body through games and becoming familiar with the parts of our body.
Year 2 Students will: • Notice that animals, including humans, have offspring which grow into adults • Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Explicit teaching of lifecycles of varying animals, including butterfly, frog and ladybird. Identify differences and similarities between offspring and the corresponding adult. Matching card activities and planning and questioning of adults who are pregnant or have a young child to help understand the experience. Teaching of the basic needs of all animals, looking at different food groups and what each of them do for animals and humans. Discussing and producing basic kit required for survival (stranded on an island activity). Teaching the need for exercise and a healthy diet (including food groups) and how the heart works – the need to warm up/down from exercise and that some exercise makes the heart beat faster and some makes it beat slower (linked with P.E.) Completing physical activities that measure the increase in heart rate as opposed to 'at rest'. Making predictions and assessing results.
Year 3 Students will: • Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	As above The makeup of animals through internal organs and their necessity and that a skeleton is needed for support, protection and movement. Creating a skeleton string puppet with moving joints and classifying animals into vertebrate and invertebrate.

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	Investigate the different foods that we eat via survey and look for patterns and trends with the data.
Year 4 Students will: • Describe the simple functions of the basic parts of the digestive system in humans • Identify the different types of teeth in humans and their simple functions • Construct and interpret a variety of food chains, identifying producers, predators and prey.	Making 'junk-model' versions of the digestive system and labelling to understand their basic functions. Identify human and animal teeth - compare functions of types of teeth. Observation over time - tooth decay (eggs in soft drinks investigations) Food chains (Danby Moors Centre activity)
Year 5 Students will: • Describe the changes as humans develop to old age.	Stages of development using staff photos.
Year 6 Students will: • 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.	Labelled diagram. A practical investigation (animal heart dissection and labelling) Blood smoothies - explanations of blood types and parts of blood. Impacts presented in advertisement/persuasive format - video adverts created to demonstrate knowledge. (Only discussed as part of above)
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

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SCIENCE - (USES OF) EVERYDAY MATERIALS - Years 1-2

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 1 Students will: • 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	Investigating objects through our senses - is it hard, bendy, smooth? Testing materials through their functions Design and technology - constructing bridges using our chosen material/making a castle model using recycled materials/making superhero flying machines. Evaluate our designs - what worked best and why? Discussing - If we could change our model, what would we do and why?
Year 2 Students will: • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses • Compare how things move on different surfaces. • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Explicit teaching of the different types of materials, their everyday uses and their alternative uses. Looking at materials that bounce, stretch, bend, rigid and flexible and how they work and operate. Investigate how much materials will bend with a weight under the same condition – by completing a fair test. Experiments of moving different objects on different surfaces, such as plastic, carpet, concrete, wood and playground. Conducting fair tests on changes of shapes based on different types of force, explaining what a 'fair test' is and how we conduct an experiment – carrying out the experiments and analysing the data to find answers to particular questions.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

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SCIENCE - ALL LIVINGS THINGS (AND THEIR HABITATS) - Years 4 - 6

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 4 Students will: • Recognise that living things can be grouped in a variety of ways • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • Recognise that environments can change and that this can sometimes pose dangers to living things.	Classification keys. Linnaeus systems to classify living things. Growing our own turf in trays from different seed mix. Effects of pollution (e.g. Shipwreck in a bottle investigation) Adaptation of animals - BBC Bitesize unit.
Year 5 Students will: • 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.	Overview of gestation - young and adult of the adjacent. Hamilton unit - Keen to be green SRE - Y5/Y6
Year 6 Students will: • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.	See above - Y4 Linnaeus Classification - Danby Moors Centre activity

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IMPACT:	FUTURE FOCI (to inform action plan or SIP):

SCIENCE - ROCKS - Year 3 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 3 Students will: • 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.	Teaching of igneous, sedimentary and metamorphic rocks. What they look like, feel like and their formation. Children have experience of seeing, feeling and experiencing different types of rock. Conduct survey of local area to identify different rocks, their purpose and how they are formed. Learn how fossils are made and record by writing and illustrating the stages or through sequencing a text. Handle real fossils and rehearse the stages of fossil formation through oral retelling, with children supplying their own fossils for discussion on how they were obtained and how they were formed. Teaching on the development and look of fossils including living things trapped within rocks.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

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SCIENCE - LIGHT - Year 3 and 6 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 3 Students will: • Recognise that they need light in order to see things and that dark is the absence of light • Notice that light is reflected from surfaces • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes • Recognise that shadows are formed when the light from a light source is blocked by a solid object • Find patterns in the way that the size of shadows change.	Experiments with reflections and shadows using a light source, predict and then investigate how well different colours and materials reflect light in a simulated dark space. E.g. Guessing a shadow an object projects and describing different shadows using relevant words such as transparent, translucent and opaque. Teaching of a light source and their purpose, explore the effect of moving the light source on shadows, observe a demonstration of light travelling in straight lines and its effect on shadows and understand and explain shadow data. Exploring the effect of moving a light source on shadows and the effect on the size of the shadows and collating the data to show the changes. Make Whizzer Wheels to demonstrate the development and construction of a spectrum. Also secured in Year 4 (Lights, Camera, Action) – Shadow puppets (see below).
Year 6 Students will: • 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	Lights, camera, action - shadow puppets. Measuring the effects of moving a light source closer to or further from an object. (Shadow art silhouettes).

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• 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	Camera Obscures - STEM Projects. Space - Sun, earth, moon (light) Shadow puppets - transparent and translucent materials.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - FORCES AND MAGNETS - Year 3 and 5

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 3 Students will: • 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.	Work done with opposing magnetic poles, teaching that opposites attract and similar repels. Conducting fair tests on the force of different magnets on different metals and that not all magnets act the same (dependent on strength and the metal its attracting). Experimenting how they work on different materials, such as carpet, wood, metal, plastic etc. Predict which objects will move on what surface using different magnets and recording and analysing data and feeding back to the class. STEM – May the Force Be with You. Explore, predict, compare and test the strength of different magnets and that different metals are more receptive to some magnets. Explain that there are a north and a south pole and that attraction is north – south and repelling is north -north and south – south. Based on understanding, children are then able to predict response of magnets. Investigating pushing and pulling by playing Sporty Forces. STEM - Acting Forces.

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	Conducting fair tests to establish strength of different magnets and how the surface can have an effect, using different metallic objects such as a paper clip, a toy car, a coin and buttons. Ask scientific questions to clarify understanding.
Year 5 Students will: • 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	Friction football boots (Lego) - STEM - design the best stud pattern. Newton, Galileo and Copernicus – negating previously held beliefs to better understand scientific basis for how the world works. Gravity and forces - parachute STEM activity Rockets - forces (up thrust and air resistance). STEM - foil boats (air and water resistance) Techcard - using pulleys, levers and gears to propel models (DT) Assessing the effects of friction on these models.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

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SCIENCE - STATES OF MATTER - Year 4 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 4 Students will: • Compare and group materials together, according to whether they are solids, liquids or gases • Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Hula-hoop Venn diagram models (Maths) Insulation cups of hot and cold water with different materials and measuring with data loggers - temperature. Making our own plastic (irreversible changes for milk and vinegar) Make flapjack - cooking and changing states (DT)
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - SOUND - Year 4 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 4 Students will: • Identify how sounds are made, associating some of them with something vibrating	Eureka Visit - Entire sound gallery. Making our own musical instruments

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• Recognise that vibrations from sounds travel through a medium to the ear • Find patterns between the pitch of a sound and features of the object that produced it • Find patterns between the volume of a sound and the strength of the vibrations that produced it. • Recognise that sounds get fainter as the distance from the sound source increases	Tuning fork in water demonstrations Ear defenders (STEM) - Noise pollution String telephones to demonstrate how sound travels. Pitch and volume of instruments (Music) Ear cones (STEM) - links to animal adaptations Sign language input
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - ELECTRICITY - Years 4 and 6

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 4 Students will: • 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	Electrical safety in the home posters. Appliances (Maths and battery powered) Build own circuits based on diagram. Create own diagram based on circuit. Test of circuit is created (will components work?) Electric 'balls' - testing conductivity of humans, water, fruit/veg, metals and other materials.

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• Recognise some common conductors and insulators, and associate metals with being good conductors.	
Year 6 Students will: • 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.	As above Increase the number of cells in a circuit. Explain the difference in how components work. Understand bulbs, buzzers and motors as a transducers - logged through knowledge organisers. Build our own 'electric buzzer' game with above knowledge, using copper (DT)
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - EARTH AND SPACE - Year 5 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 5 Students will: • 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	Space dome visit. Make our own orrery. Light - torch and balls explanation of Moon's. Galileo, Copernicus and Neil Armstrong.

• 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.	Moon phases (Art) using chalk drawings to explain findings of above demonstration.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - PROPERTIES AND CHANGE OF MATERIALS - Year 5 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 5 Students will: • 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	Shipwreck in a bottle investigation – children separate materials based on their solubility and conductivity. This includes heating of salt water to separate materials and to retrieve a substance from a solution. Also included: sieving/filtering of sand and other solids from liquids; using magnets to separate iron filings from 'shipwreck'.

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• 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.	Making own plastic – milk and vinegar investigation, recognising that these materials cannot be recovered after this irreversible change. Mixing of vinegar and bicarbonate of soda – another example of an irreversible change. Demonstration of how gas may be created (observably). Grouping of materials based on their properties (Hula-hoop Venn diagram activity). Forest Schools – impact of burning materials on the environment. Understanding of 3 elements of fire building taught to explain how thermal energy can be produced through the burning of materials (and which materials are best suited to fire building and cooking on fires)
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**

SCIENCE - EVOLUTION - Year 6 only

Intent - What is taught? (Objectives) Beyond?	Implementation – When, How, Where and Why?
Year 6 Students will: • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago	BBC Bitesize unit - https://www.bbc.co.uk/bitesize/topics/zvhhvcw (Adaptation, Evolution and Inheritance) used to taught the changes over time in the Animal and Plant Kingdoms.

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• Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	*With sensitivity*, Family Tree (or mock family tree) activity, where traits from parents are drawn 'into' a child's portrait. Local historical study – Castle Hill – used to identify artefacts, including fossils and how this provides information of the local area in the past.
IMPACT:	**FUTURE FOCI (to inform action plan or SIP):**