**YEAR 1**

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| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| **Topic** | Who Am I | Celebrations | Polar Adventurers | Treasure Island | On Safari | Holiday |

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| **National Curriculum objectives****Children should:** |
| **Animals:** To be able to identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.  | **Seasonal changes:** To be able to observe changes across the four seasons.To be able to observe and describe weather associated with the seasons and how day length varies |
| **Everyday materials:**To be able to distinguish between an object and the material from which it is madeTo be able to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rockTo be able to describe the simple physical properties of a variety of everyday materialsTo be able to compare and group together a variety of everyday materials on the basis of their simple physical properties. | **Plants:**To be able to identify and name a variety of common wild and garden plants, including deciduous and evergreen trees To be able to identify and describe the basic structure of a variety of common flowering plants, including trees.  |
| **Animals, including humans:** To be able to identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals To be able to identify and name a variety of common animals that are carnivores, herbivores and omnivoresTo be able to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)  |  |

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| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| **Topic** | Healthy Me | Materials Monster | Mini Worlds | Move It | Young Gardeners | Little Masterchef  |

**YEAR 2**

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| **National Curriculum objectives****Children should:** |
| **Animals, including humans:**To notice that animals, including humans, have offspring which grow into adults To find out about and describe the basic needs of animals, including humans, for survival (water, food and air) To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.  | **Uses of everyday materials:**To be able to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. To be able to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.  |
| **Living things and their habitats:**To be able to explore and compare the differences between things that are living, dead, and things that have never been alive To be able to identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other To be able to identify and name a variety of plants and animals in their habitats, including micro-habitats To be able to describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. | **Plants:**To be able observe and describe how seeds and bulbs grow into mature plants. To be able find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. |

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| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| Topic | Earth Rocks | Food and Our Bodies | Mirror, Mirror | How Does Your Garden Grow | Opposites Attract | We are Astronauts  |

**YEAR 3**

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| **National Curriculum objectives****Children should:** |
| **Rocks:**Compare and group together different kinds of rocks on the basis of their appearance and simple physical propertiesDescribe 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. | **Animals, including humans:**To be able to identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat To be able to identify that humans and some other animals have skeletons and muscles for support, protection and movement.  |
| **Light:**Recognise that they need light in order to see things and that dark is the absence of lightNotice that light is reflected from surfacesRecognise that light from the sun can be dangerous and that there are ways to protect their eyesRecognise that shadows are formed when the light from a light source is blocked by an opaque objectFind patterns in the way that the size of shadows change | **Plants:**To be able to identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers To be able to 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 To be able to investigate the way in which water is transported within plants To be able to explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.  |
| **Forces and magnets:** To be able to compare how things move on different surfaces To be able to notice that some forces need contact between two objects, but magnetic forces can act at a distance To be able to observe how magnets attract or repel each other and attract some materials and not others To be able to compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials To be able to describe magnets as having two poles To be able to predict whether two magnets will attract or repel each other, depending on which poles are facing.  |
| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| Topic | What’s That Sound | Living Things | Looking at States | Teeth and Eating | Power Up | Brilliant Bubbles  |

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| **Year 4 National Curriculum objectives****Children should:** |
| **Sound:**To be able to identify how sounds are made, associating some of them with something vibrating To be able to recognise that vibrations from sounds travel through a medium to the ear To be able to find patterns between the pitch of a sound and features of the object that produced it To be able to find patterns between the volume of a sound and the strength of the vibrations that produced it To be able to recognise that sounds get fainter as the distance from the sound source increases.  | **Living things and their habitats**To be able to recognise that living things can be grouped in a variety of waysTo be able to explore and use classification keys to help group, identify and name a variety of living things in their local and wider environmentTo be able to recognise that environments can change and that this can sometimes pose dangers to living things |
| **States of matter**To be able to compare and group materials together, according to whether they are solids, liquids or gasesTo be able to observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)To be able to identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature | **Animals including humans:** To be able to describe the simple functions of the basic parts of the digestive system in humans To be able to identify the different types of teeth in humans and their simple functions To be able to construct and interpret a variety of food chains, identifying producers, predators and prey.  |
| **Electricity**: * To be able to identify common appliances that run on electricity
* To be able to construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
* To be able to identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
* To be able to recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
* To be able to recognise some common conductors and insulators, and associate metals with being good conductors.
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| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| Topic | Out of this World | Material World | Circle of Life | Let’s Get Moving | Growing Up and Growing Old | Super Scientists  |

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| **Year 5 National Curriculum objectives****Children should:** |
| **Earth and space:** To be able to describe the movement of the Earth, and other planets, relative to the Sun in the solar system To be able to describe the movement of the Moon relative to the Earth To be able to describe the Sun, Earth and Moon as approximately spherical bodies To be able to use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky.  | **Properties and changes to materials:**To be able to 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 To be able to know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution To be able to use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating To be able to give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic To be able to demonstrate that dissolving, mixing & changes of state are reversible changes To be able to 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. |
| **Living things and their habitats**Be taught to:* 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
 | **Forces**To be able to explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling objectTo be able to identify the effects of air resistance, water resistance and friction, that act between moving surfacesTo be able to recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect |
| **Animals, including humans:**To be able to describe the changes as humans develop to old age.  |  |

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| **Term** | **Aut1** | **Aut2** | **Spr1** | **Spr2** | **Sum1** | **Sum2** |
| Topic | Classifying Critters | Staying Alive | We’re Evolving | Let it Shine | Electrifying | We are Dinosaur Hunters |

**YEAR 6**

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| **Year 6 National Curriculum objectives****Children should:** |
| **Living things and their habitats:**To be able to 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 To be able to give reasons for classifying plants and animals based on specific characteristics. | **Animals, including humans:**To be able to identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood To be able to recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function To be able to describe the ways in which nutrients and water are transported within animals, including humans.  |
| **Evolution and inheritance:**To be able to recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. To be able to recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents To be able to identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.  | **Light:** To be able to recognise that light appears to travel in straight lines. To be able to 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.To be able to 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.To be able to use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.  |
| **Electricity**To be able to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuitTo be able to 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 switchesTo be able to use recognised symbols when representing a simple circuit in a diagram |