

Whole School Science Plan Topic Grid by Phase

Working Scientifically is weaved into every Science block, across all year groups.

Cycle B – 2020 / 2021

Phase	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS Topic	Do you want to be friends?	Why do Squirrels hide their nuts?	Do Cows Drink Milk?	Are we there yet?	Why do ladybirds have spots?	Will you read me a story?
EYFS Science	Materials	Animals Including Humans	Animals Including Humans	Living things and their habitats	Living things and their habitats	Plants
Year 1 and 2 Topic	Street Detectives (History) 2	Bright Lights, Bright City (Geog) 1	Moon Zoom (DT) 1	Paws, Claws & Whiskers (Art & Design) 1	Scented Garden (Science) 2	Beach combers (Science) 2
Year 1 and 2 Science	Plants Objectives: 1. Identify and name a variety of common plants, including garden plants, wild plants and trees and those classified as deciduous and evergreen. 2. Identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers.	Plants Objectives: 3. Observe and describe how seeds and bulbs grow into mature plants. 4. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Animals, Including Humans Objectives: 1. Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates. 2. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. 3. Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, including pets).	Animals, Including Humans Objectives: 4. Identify name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 5. Notice that animals, including humans, have offspring which grow into adults. 6. Investigate and describe the basic needs of animals, including humans, for survival (water, food and air). 7. Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.	Living things and their habitats Objectives: 1. Explore and compare the differences between things that living, dead, and things that have never been alive. 2. 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.	Living things and their habitats Objectives: 3. Identify and name a variety of plants and animals in their habitats, including microhabitats. 4. 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.
Year 3 and 4 Topic	I am Warrior- Romans (History) 4	Burps, Bottoms & Biles (Science 4)	Scrumdidlyumptious (DT) 3	Playlist (Music) 4	Traders & Raiders- Saxons & Vikings (History) 4	Road Trip USA (Geog) 4
Year 3 and 4 Science	Animals, Including Humans Objectives: 1. 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. 2. Identify that humans and some other animals have skeletons and muscles for	Animals, Including Humans Objectives: 3. Describe the simple functions of the basic parts of the digestive system in humans. 4. Identify the different types of teeth in humans and their simple functions. 5. Construct and interpret a variety of food chains,	Child Led Science Enquiry An opportunity for children to think scientifically and lead their own investigations. Decide on a topic, have a class discussion about what the children would like to know, formulate	Sound Objectives: 1. Identify how sounds are made, associating some of them with something vibrating. 2. Recognise that vibrations from sounds travel through a medium to the ear. 3. Find patterns between the pitch of a sound and	Forces and Magnets Objectives: 1. Compare how things move on different surfaces notice that some forces need contact between two objects, but magnetic forces can act at a distance. 2. Observe how magnets attract or repel each other and attract some materials and not others.	Electricity Objectives: 1. Identify common appliances that run on electricity. 2. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 3. Identify whether or not a lamp will light in a simple

	support, protection and movement.	identifying producers, predators and prey.	questions and away you go.	<p>features of the object that produced it.</p> <p>4. Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>5. Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>3. 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>4. Describe magnets as having two poles.</p> <p>5. Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>	<p>series circuit, based on whether or not the lamp is part of a complete loop with a battery.</p> <p>4. 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>5. Recognise some common conductors and insulators, and associate metals with being good conductors.</p>
Year 5 and 6 Topic	Sow, grow & Farm- Geog 5 (Sci)	A Child's War (Hist) 6	Stargazers (Science) 5	Darwin's Delights (Science) 6	Pharaohs (Hist) 5	Tomorrow's World (Computing) 6
Year 5 and 6 Science	Living Things and Their Habitats <p>Objectives:</p> <ol style="list-style-type: none"> 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. 	Child Led Science Enquiry <p>An opportunity for children to think scientifically and lead their own investigations.</p> <p>Decide on a topic, have a class discussion about what the children would like to know, formulate questions and away you go.</p>	Earth and Space <p>Objectives:</p> <ol style="list-style-type: none"> 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. 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. 	Evolution and Inheritance <p>Objectives:</p> <ol style="list-style-type: none"> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. 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. 	Forces and Magnets <p>Objectives:</p> <ol style="list-style-type: none"> 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. 	Electricity <p>Objectives:</p> <ol style="list-style-type: none"> 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.