Science Curriculum Map

Year	Autumn		Spring		Summer	
*Reception	**Animals inc humans** O*bservational* drawing. *Identifying* minibeasts and *naming* different parts of their bodies. (Wings, antennas etc)	**Space** Recognise earth, sun, moon and other planets. Rocket making – bicarb & vinegar experiment. **Artic** Arctic – Learn about the Arctic Habitat and its differences to our local environment. Freezing/melting	**States of Matter** Baking Gingerbread men and bread. Describe, observe and describe changes e.g., melting butter, combining ingredients.	**Plants** Plant seeds - *observe* growth of beans over time. Planting bulbs and vegetables in the classrooms and the gardens. (Strawberries, cucumbers etc) **Life cycles** Caterpillars to Butterflies *Observing changes over time*	**Living things and their habitats** Label the different parts of a fish (fin, scales, tail etc) Sorting sea and land creatures into their habitats. Observing, talking about and identifying different sea creatures.	**Plants** Woodland - Identifying different trees. Introduce deciduous and evergreen.
Year 1	**Animals inc humans** Identify the basic body parts as well as the body parts which are associated with each sense (human focus). Identify and name a variety of animals and begin to look at their structure (animal focus).		**Everyday materials** Begin to understand the difference between objects and the materials they are made from. Begin to identify and name materials as well as identify some of their physical properties.		**Plants** Identify common wild and garden plants as well as deciduous and evergreen trees. Begin to understand the basic structure of plants and trees.	
	Seasons					
Year 2	**Animals, including humans** Describe the basic needs of humans for survival.Explain the importance of exercise, a healthy diet and hygiene for humans. Notice that animals have offspring which grow into adults.	**Living things and their habitats** Identify and explore things that are alive, dead or never alive. Begin to explore different habitats and understand that most living things live in a habitat which provides basic needs.	**Living things and their habitats** Explore where different animals live and why , and where do animals find their food. Begin using a simple food chain.	**Uses of everyday materials** Identify and compare the suitability of everyday materials.	**Uses of everyday materials** Investigate how the shape of some solid objects can be changed by human force.	**Plants** Observe and describe how bulbs grow into mature plants. (Bulbs need to be planted in Autumn).
Year 3	**Light** Begin to understand why we need light and what darkness is. Recognise how light is reflected and how light from the sun can	**Animals, including humans** Identify that nutrition comes from the food we eat (nutrition). Identify that humans and some other animals have	**Forces and Magnets** Investigate how things move on a surface and identify that some forces require contact. Describe and observe how magnets work and what everyday materials are attracted to magnets.		**Materials -Rocks** Compare and group rocks based on their physical properties. Describe how fossils are formed and understand soil is made up	**Plants (mid SU1+SU2)** Continue to explore the requirements of plants for growth. Identify the functions of the different structures of a plant

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	damage our eyes and investigate shadows.	skeletons and muscles for support, protection and movement (movement).			of rocks and organic matter.	including how water is transported. Explore plant life cycles of plants and the role of the flower in a flowering plant.
Year 4	**Animals, including humans** Investigate the digestive system in humans and the role of our teeth (human focus). Construct and interpret food chains identifying the predator, prey and producer (animal focus).	**States of Matter** Recognise that materials are grouped as solids, liquids or gases. To understand that the state of a material can change. Understanding the water cycle.	**Sound** Identify how sounds are made and how these vibrations travel to our ears. Investigate pitch and volume.	**Electricity** Identify common appliances that run on electricity. Construct a simple series circuit and carry out investigations involving lamps and switches. Recognise common conductors and insulators**.**	**Living things and their habitats x 2 units** Develop understanding that living things can be grouped in different ways using classification keys. To understand that environments can change which poses a risk to living things.	
Year 5	**Forces** Understand the force of gravity acting between the Earth and a falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces. Understand that force and motion can be transferred through mechanical devices such as gears, pulley.	**Earth & Space** 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. 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 of materials** Compare and group materials based on their properties. Notice how some materials dissolve. Investigate different methods of separating mixtures. Give reasons based on evidence for uses of everyday materials. Understand the difference between reversible and irreversible changes.		**Living Things and their habitats** 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.	**Animals, including humans.** Describe the changes as humans develop to old age (including puberty).
Year 6	**Electricity** Investigate how the number and voltage of cells in a circuit impacts components in the circuit. Compare and give reasons for variations of components and begin to draw diagrams of circuits.	**Light** Understand how light travels in straight lines and the implications of this. Understand how light helps us to see objects and explain why shadows have the same shape as the objects that cast them.	**Animals, including humans** Understand how the circulatory system works to transport blood, nutrients and water. Understand the impact of diet, exercise, drugs and lifestyle on our bodies.	**Living Things & their Habitats** Use classification keys, extending this to micro-organisms. Begin to give reasons for classification.	**Evolution and inheritance** Understand how living things have evolved and adapted over time. Understand variation in offspring.	

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	using symbols. draw diagrams of circuits using symbols.				

KS1 skills	Identify/classify	Observe	Use equipment	Measure	Gather and record data	Research	Ask simple questions	Suggest answers	
KS2 Skills	Identify changes / classify	Observe	Use equipment	Measure	Ask scientific questions	Predict	Research	Gather, record and present results	Problem solve
KS2 skills con	Interpret results	Evaluate investigations	Use models to explain scientific ideas	Plan a fair test	Observe over time	Plan a survey	Carry out a survey		