Curriculum Map: Science

Year 2

Below outlines the learning focus for each term

Term	Learning Focus		Conceptual Development
	Knowledge	Skills	
	Uses of everyday materials	comparing the uses of everyday materials in	Build upon:
	To identify and compare the suitability of a variety of	and around the school with materials found	Distinguish between an object and the material from
	everyday materials, including wood, metal, plastic,	in other places (at home, the journey to	which it is made.
	glass, brick, rock, paper and cardboard for particular	school, on visits, and in stories, rhymes and	
Autumn 1	uses	songs)	Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
			including wood, plastic, glass, metal, water, and rock
	To know that the shapes of solid objects made from	observing closely, identifying and classifying	Describe the simple physical properties of a variety of
	some materials can be changed by squashing, bending,	the uses of different materials, and	everyday materials.
	twisting and stretching.	recording their observations	
			Become familiar with the names of materials and
	To identify and discuss the uses of different everyday		properties such as: hard/soft; stretchy/stiff; shiny/du
	materials so that they become familiar with how some		rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent;
	materials are used for more than one thing (metal can		opaque/transparent.
	be used for coins, cans, cars and table legs; wood can		
	be used for matches, floors, and telegraph poles)		To explore a wide range of materials e.g bricks,
	To know that different materials are used for the same		foil,elastic, paper, fabrics – Year 1
	thing (spoons can be made from plastic, wood, metal,		
	but not normally from glass).		Prepare for:
	but not normally norm glassy.		To explore a variety of everyday materials and develo simple descriptions of the states of matter
	To know the properties of materials makes them		simple descriptions of the states of matter
	suitable or unsuitable for particular purposes		To compare and group materials together, according
			to whether they are solids, liquids or gases
	To think about unusual and creative uses for everyday		To observe that some materials change state when
	materials.		they are heated or cooled, and measure or research
			the temperature at which this happens in degrees
	To Find out about people who have developed useful		Celsius (°C)
	new materials, for example John Dunlop, Charles		
	Macintosh or John McAdam.		To give reasons, based on evidence from comparative
			and fair tests, for the particular uses of everyday materials, including metals, wood and plastic - Year 4
			materials, including metals, wood and plastic - fear 4
			To compare and group together everyday materials o

			the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets – Year 5
Autumn 2	 Living things and their Habitats To explore and compare the differences between things that are living, dead, and things that have never been alive To identify that most living things live in habitats to which they are suited. To describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other To identify and name a variety of plants and animals in their habitats, including microhabitats 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. To be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. To be introduced to the terms 'habitat' (a natural environment or home of a variety of plants and animals) and 'micro-habitat' (a very small habitat, for example for woodlice under stones, logs or leaf litter). To compare animals in familiar habitats with animals found in less familiar habitats, for example, on the seashore, in woodland, in the ocean, in the rainforest. 	sorting and classifying things according to whether they are living, dead or were never alive recording their findings using charts. describe how they decided where to place things, exploring questions for example: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions. construct a simple food chain that includes humans (e.g. grass, cow, human). Raise and answer questions about life processes & habitats	Build upon: Learning about minibeasts and looking for them in their habitats - EYFS Prepare for: To recognise that living things (including those in the locality) can be grouped in a variety of ways To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment – Year 4

	Animals, including humans	To be observing, through video or first-hand	Build upon:
	To notice that animals, including humans, have	observation and measurement, how	Identify and name a variety of common animals
Spring	offspring which grow into adults	different animals, including humans, grow	including fish, amphibians, reptiles, birds and mammals.
	To be introduced to the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans.	To asking questions about what things animals need for survival and what humans need to stay healthy	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
	To describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	suggesting ways to find answers to their questions.	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
	To be introduced to the processes of reproduction and growth in animals.		To know how to take care of animals that are taken from the environment – Year 1
	The focus at this stage should be on questions that help pupils to recognise growth; they should not be expected to understand how reproduction occurs.		Prepare for: 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 – Year 3
	Plants To observe and describe how seeds and bulbs grow into mature plants	Observe and record, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb,	Build upon : Identify and name a variety of common wild and garden plants, including deciduous and evergreen
Summer	 To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy To use the local environment throughout the year to observe how different plants grow. To be be introduced to the requirements of plants for germination, growth and survival, as well as to the processes of reproduction and growth in plants. Seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them 	To observe similar plants at different stages of growth setting up a comparative test to show that plants need light and wter	trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. To observe and explore plants in the local environment. To observe changes in growth of flowers and vegetables they have planted – Year 1 Prepare for: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

	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.
	Know the relationship between structure and function: the idea that every part has a job to do.
	Note: Pupils can be introduced to the idea that plants can make their own food, but at this stage they do not need to understand how this happens – Year 3