Science - Skills Progression Map

Skills	EYFS	Year 1	Year 2	Year 3, 3/ 4 and 4	Year 5	Year 6
Seasonal changes	Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter	observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.				
Animals including humans	Explore the natural world around them, making observations and drawing pictures of animals and plants. Minibeasts and life cycles	identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. behaviour and habitats of creatures. Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles,	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.	Learn about the first stage of the digestive system. Describe the simple functions of the basic parts of the digestive system in humans Recognise that environments can change and that this can sometimes pose dangers to living things.	Human life cycle including growth, development, puberty and old age	Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood.

		birds and mammals, including pets.)				
Living things/ plants	Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Plants, flowers and trees	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 - including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem.	Investigate habitats and food chains Identify and classify. Explore and compare the differences between things that are living, dead, and things that have never been alive 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	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment Ask relevant questions and use different types of scientific enquiries to answer them	Develop knowledge of more complex life cycles. Describe the life process of reproduction in some plants and animals Record data and results of increasing complexity using scientific diagrams and labels.	Describe how living things are classified into broad groups according to common characteristics and based on similarities and differences, including microorganisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics.
Materials	Understand some important processes and changes in the natural world around them, including the seasons and changing **states of matte**r Properties of	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	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	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	Compare and group together everyday materials on the basis of their properties, including their hardness, transparency, and conductivity (electrical and thermal)	

	materials, soft, hard, smooth, rough	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 Explore a range of materials suitable for a specific purpose	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Set up simple practical enquiries and comparative and fair tests.	Know that some materials will dissolve in liquid to form a solution	
Light						Use the idea and explain that light travels in straight lines, we see objects because they reflect light and explain why shadows have the same shape as the objects that cast them.

Rocks						
Forces					Explain how objects fall due to gravity. Identify the effects of air resistance, water resistance and friction. recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	
Electricity				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		Design your own light system - use motors, switches, bulbs and buzzers and recognise each symbol. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary - Report and present findings
Sound				Identify how sounds are made, associating some of		

				them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear		
Earth and space					Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. 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						Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.