Science Concept Mapping 2022 - 2023

Theme	How does this look in EYFS?	How does this look in Year 1?	How does this look in Year 2?
Animals (including humans)	• Learning about animals and pets in the environment, naming and using vocabulary to describe features • Discovering the importance of keeping healthy and hygienic and suggesting ways that they can maintain this	• Learning about what animals and humans eat, using scientific terminology e.g. omnivore • Classifying and sorting them depending on a range of characteristics e.g. how their bodies are formed • Learning scientific names for body parts, both seen and unseen and knowing how certain body parts are linked to our senses • Comparing the bodies of different animals and identifying them as: birds, fish, amphibians, reptiles, mammals and invertebrates	• Describing what humans and animals need to survive, explaining how they reproduce and continue a 'life cycle.' • Learning about a balanced died and the need to be hygienic
Plants	• Learning about seeds and how these can grow into plants, when they are taken care of and given sunlight and water • Naming some plants	• Learning the names of common plants and trees, identifying the parts and common features • Planting their own flowers, plants or vegetables and observing how they grow and change • Categorising trees into deciduous or evergreen	• Learning what plants need to grow and survive and will discover the difference between seeds and bulbs • Finding out about how plants reproduce by dispersing their seeds
Seasonal Changes	• Talking about similarities and differences between the seasons and how this can affect the weather and how we dress • Naming and learning about changes that happen within the seasons	• Observing changes across the 4 seasons, which they will learn in order • Observing and describing changes including the weather and seasons and how this can affect the day light	• Continuing to observe the weather and the seasons, linking the learning in Geography (e.g. the equator) to what they have learnt in Science
Materials	• Using vocabulary to discuss and describe objects in their environment • Name materials and recognise that these can be used for different purposes	• Naming and sorting a range of materials by their properties and through using their senses • Distinguishing between objects and materials	• Describing, naming and grouping materials based on their properties • Exploring how materials can be changed and finding out about people

		• Exploring how solid shapes can be changed	who have made new materials e.g. Charles Macintosh • Identifying and comparing suitability of materials • Gaining an awareness of solids, liquids and gases and what these are
Living things and their habitats	• Taught to show care and concern for living things • Discovering where animals live (habitats) and understanding that living things grow, live and die • Understanding the habitat that they live in. • Realising that living things have different needs and to help them survive they may live in different habitats	• Considering how animals are suited to their environments and knowing that living things live in a variety of habitats. • Sorting objects, humans and animals into living and non-living	• Matching certain living things to the habitats in which they are living and considering how the habitat support the needs of the animals. • Learning about food chains and energy sources • Explaining the difference between living and non-living things and classifying whether something is dead, alive or has never been alive • Understanding what life processes need to occur for something to be alive (MRS GREN)
Environment	• Discovering the natural world around them and being taught the importance of the need to care for it • Suggesting ways in which they and others can care for the environment, recognising that sometimes humans can also cause harm to it	• Learning 3 ways that they can help to protect the planet • Finding out about recycling considering why and how we can do this • Learning about what happens to waste • Introduced to deforestation (link to Geography) • Taught that because of humans, habitats have been destroyed	• Learning about the 3 Rs – Reduce, Reuse, Recycle and how they can contribute to this in their lives • Introduced to Global Warming (through Geography topic) and considering how this impacts life
Working Scientifically	• Observing the natural world around them and talking about this, sharing what they have noticed, with others (Observing) • Using their observations to suggest why things may have happened, how they have	• Making observations using their senses and will be taught how to use simple equipment. (Observing)	• Comparing several things, making observations on what they have seen, touched, smelt or tasted) to help them answer scientific questions (Observing)

	changed and to notice patterns(Observing) • Looking for similarities and differences to classify objects, animals and plants simply (Identifying and Classifying) • Performing simple tests and coming up with ideas for their own investigations (Performing Tests)	• Understanding what a test is and performing simple tests, using simple equipment. (Performing Tests) • Asking questions and answering questions and explaining reasons for their answers regarding scientific concepts (Identifying and Classifying) • Explaining what they have found out e.g. what was similar and what was different using some scientific vocabulary (Identifying and Classifying) • Identifying and classifying what they observe (Identifying and Classifying) • Presenting their work in a variety of different ways e.g. through discussion, using pictures or a chart (Recording Findings) • Sorting objects, animals and materials based on criteria (Identifying and Classifying) • Making predictions (Performing Tests) • Recording and interpreting their findings using standard units (Recording Findings)	• Learning about fair testing and variable and knowing that some things needs to stay the same to make it a fair test (Performing tests) • Suggesting ways in which they can find things out and making predictions about what they think might happen, saying why they think that (Performing tests) • Sorting in a variety of different ways using more than one criterion (Identifying and classifying) • Looking for and identifying patterns/ associations e.g. animals in the arctic mainly have white fur. (Identifying and Classifying) • Measuring accurately in divisions of 1s,2s,5s and 10s, using standard units and drawing conclusions from what they have found out (Recording Findings)