Year 2 Progression in Science Grid						
Topic	**Plants**	**Animals including humans**	**Living things and their habitats**	**Materials**	**Humans and healthy lifestyles**	**Living things and their habitats**
Prior knowledge	**From Y1** Name the main parts of plants and trees Identify deciduous and evergreen trees	**From Rec** Life cycles of chicks and butterflies	**From Y1** Identify which animals are fish, amphibians, reptiles, birds and mammals	**From Y1** Distinguish between an object and the material from which it is made Describe the simple physical properties of a variety of everyday materials Organise objects or materials into groups	**From Y1** Name the main parts of the body, including those related to the 5 senses	**From Y2 Spring 1** Describe how some plants and animals are suited to different habitats.
Prior knowledge for working scientifically	**From Y1** How to ask simple questions • How to say what might happen in an investigation • How to follow instructions to complete a simple test • How to make observations • How to sort and group objects, materials and living things • How to collect simple data • How to record simple data in a table • How to talk about my findings					
Key vocabulary	Water, light, temperature, grow healthy, germination, reproduction trunk, branches, stem, seeds, bulbs, leaves, mature plants nutrients, flowers blossom, petals fruit, roots	Living, dead, non-living, air food, water, shelter, reproduce, egg, child, teenager, chick, chicken caterpillar, pupa butterfly spawn, tadpole frog	Habitat, micro habitat, food chain Field, hedgerow, Pond, heat, warmth, woodland Seashore, ocean Rainforest, arctic desert,, air, food water, shelter sun	Wood plastic Glass metal Water rock Brick paper Card rubber Fur fleece Cotton wool polyester cotton wool squash bend twist stretch soft, hard, rough, smooth, translucent, transparent, opaque	exercise hygiene nutrition balanced diet	Micro habitat Logs, leaves, soil, worm, woodlouse, ladybird, conditions
Statutory requirements	Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Explore and compare the differences between things that are living, dead, and things that have never been alive 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)	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 Identify and name a variety of plants and animals in their habitats, including microhabitats 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.	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.	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Identify and name a variety of plants and animals in their habitats, including microhabitats
Key Performance Indicators	Describe the basic needs for plant growth (light, water, appropriate temperature).	Notice that animals, including humans, have offspring which grow into adults	Describe how some plants and animals are suited to different habitats.	Describe different uses of materials according to their properties.	Describe the importance of exercise, eating the right amounts of different foods and hygiene for humans.	Describe how some plants and animals are suited to different micro-habitats.

		Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Describe how animals obtain food by eating plants or other animals			
Essential knowledge	I know … • Plants grow from seeds, bulbs and cuttings • Germination is when a seed begins to sprout. • Not all seeds germinate in the same way • Plants need water, light and a suitable temperature to grow. • The life cycle of a plant. • Fruit, berries and nuts carry the seeds to make new plants. • How to compare seeds and the plants they grow into	I know… Animals needs clean water, food and air to survive. • Offspring are the children of its parents • Some offspring look different to their parents. • As we get older, our body changes and things we can do change	I know… Animals obtain their food from plants and other animals – this is a food chain. A habitat is an animal's home. • Woodland, ocean, desert, forest, grassland and pond are examples of habitats. • Different habitats provide for the basics of different kinds of animals and plants.	I know … • Materials can be sorted according to their properties. • Items are made from certain materials because of their properties. • How to test which material is best for a spillage. • Some materials can change by bending, twisting, stretching and squashing. • Not all materials can change shape. • How to test which material is stretchiest	I know… It is important to eat a balanced diet. • Cleaning my teeth, washing my hands and having a bath/shower will keep be clean. • Exercise will keep me healthy.	I know… • Different habitats provide for the basics of different kinds of animals and plants. A micro-habitat is a small area which differs from the surrounding habitat
Investigations and Working Scientifically to be covered	What does cress need to grow? (Observing Over Time)	Is there a stage in the life cycle where humans learn the most things? (Looking for patterns)	What do birds eat in winter? (observe over time)	What materials are suitable and waterproof for a house? (Fair testing) John McAdam (Researching Using secondary sources)	What happens to our heart during exercise? (Looking for patterns) Why do we need to wash our hands? (Fair testing)	Do all minibeasts prefer the same microhabitat? (Observing over time)
KPIs for Working Scientifically	I know … • How to ask simple questions • Questions can be answered in different ways • How to begin to make predictions • How to make observations • How to perform a simple test • When something is unfair in a test • How to show my results in a table • How to talk about my findings using simple scientific language					
Assessment questions	What do plants grow from? What is germination? How do seeds germinate? What does a plant need to survive? What is the lifecycle of a plant? Which plants carry their own seeds?	What do humans needs to survive? What do animals need to survive? What are offspring? What happens to us as we get older?	What is a food chain? What is a habitat? Can you give an example of a habitat? Why do different animals have different habitats?	How can materials be sorted? Why do we use certain materials for certain items? How can we test which material is best for a spillage? How can you change the shape of some materials? How can we test which material is stretchiest?	How can we keep clean? What else can we do to keep healthy?	What is a microhabitat? Can you give an example of a microhabitat? Why do different animals have different microhabitats?