Happiness	Responsibility	Friendship	Respect	Courage		
SCIENCE						
Autumn 1 - Animals inc. Humans						
Who am I?			**Healthy me**			
EYFS	**Year 1**		**Year 2**			
	Knowledge	Working Scientifically	Knowledge		Working Scientifically	
I know my body parts head, chest, back, shoulders, arms, legs, knees, elbows, shins.	I know the basic parts of the human body: neck, face, ears, eyes, hair, mouth, teeth. I know that there is a skeleton inside our body. I know the names of some of the main bones in my body: skull, ribs, spine, hand, foot, kneecap, hips. I know which part of the body is associated with which sense.	I can identify and label the basic parts of the human body. I can build a 'dog biscuit' skeleton and label the basic parts and use this experience to answer questions. I can make observations using appropriate senses.	I know that animals and humans need water, food and air for survival. I know the importance of exercise and how it helps me. *Practical: Rising Stars – How does exercise help me?* I know why we need food. I know eating the right amounts and different types of food is important. *Practical: Rising Stars – Sorting Foods* I know that germs can spread and that it is important to keep clean and hygienic.		I can observe and record changes in my body during exercise. I can use data to make links between exercise and changes in my body.	
EYFS	**Polar Places – Spring 1**		*Practical: Rising Stars – Snot trail.*		Can identify and classify foods according to different categories e.g. packaged/fresh/high sugar/processed etc.	
	Knowledge	Working Scientifically				
I know the names of baby animals. I know some animals are nocturnal. I know that some animals live in water.	I know the names of a variety of common animals including fish, amphibians, reptiles, birds and mammals. I know the common names of animals most likely to be kept as pets. I know that animals can be classified depending on what they eat into carnivores, herbivores and omnivores.	I can classify animals into groups. I can record my findings on a whole class pictogram.	I know that animals including humans have offspring that grow into adults. I know that animals including humans reproduce and grow (focus on growth and not how reproduction occurs).		I can carry out a simple test and link the idea to hygiene and the fact that germs travel.	

	I know why animals camouflage and why it's important.	I can gather and record data to help answer questions (camouflage).		
EYFS	**Plants and Animals – Spring 2**			
	Knowledge	Working Scientifically		
I know the growth stages of a sunflower and a butterfly and can draws pictures with labels.

I can make observations of animals and plants and explains why some things occur and talk about changes.

Explore the natural world around them, making observations and drawing pictures of animals and plants. | I know the names of a variety of common garden birds.

I know characteristics of birds: feathers, beaks, eggs, nests, diet. | I can identify birds and record observations on a tally chart.

I can describe and compare the features of different birds. | | |

Lawley Primary School – Science KS1 progression of knowledge and Working Scientifically

			Materials		
		Autumn 2		**Materials Monster**	
EYFS		**Year 1**		**Year 2**	
		Knowledge	Working Scientifically	Knowledge	Working Scientifically
		I know that the name of an object is different from the material from which it is made. I know how to identify and name a range of materials including, but not limited to, wood, plastic, glass, metal, water and rock. I know that materials have different properties: hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/not waterproof, absorbent/not absorbent, opaque/transparent.	I can perform simple tests to explore questions. I can classify materials according to their names. I can classify materials according to their properties. I can ask simple questions and recognise that they can be answered in different ways.	I know that some materials can be used to make more than one thing. I know that different materials can be used to make the same thing. I know that a material must have certain properties to make it suitable for its purpose (including outdoor materials). *Practical investigation idea: CLEAPPS - Stretchy materials. Which material is best to make a costume (for the monster)?* I know that some materials (solids) can be both bent and twisted e.g, sponges. I know that some materials (solids) can be bent and sometimes be rigid and not be able to be bent e.g,, metal.	I can identify and compare the suitability of a variety of everyday materials. I can classify materials and link their properties with its use (including outdoor materials). I can record my observations. I can make my own choices and sort according to properties.
EYFS		**Holiday – Summer 1**		I know that some materials (solids) can be squashed.	
		Knowledge	Working Scientifically	I know that some materials (solids) can be stretched.	
I know ice can melt and why it happens. I know some things float and some sink.		I know that some materials are similar, and some are different according to their properties. I know that materials are chosen depending on their purpose e.g., plastic flip flops are waterproof.	I can compare and group together a variety of everyday materials. I can make decisions about the choice of material based on the intended use.	I know that the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. *Practical investigation idea: Rising stars – Squash me, bend me.*	I can sort objects into groups and can say why the object has been able to change its shape (can relate the ability to change to the material it is made from)

Plants					
Plants and Animals – Spring 2			**Young Gardeners – Spring 2**		
EYFS	**Year 1**			**Year 2**	
	Knowledge	Working Scientifically		Knowledge	Working Scientifically
I know what you need to plant a seed and for it to grow. I can observe the growth of seeds and can talk about changes. I know how trees have changed over the 4 seasons.	I know the names of a variety of common and garden plants: daisy, rose, tulip, daffodil, stinging nettle, buttercup, pansy, poppy, dock. I know the basic structure of a plant: leaves, flowers, petals, roots, bulb, seed, stem. *Practical investigation idea: build a plant from vegetables e.g. roots – carrots, flower – cauliflower etc.* I know the names of some common trees. I know the difference between deciduous and evergreen. I can describe the basic structure of a tree: trunk, branches, leaves, blossom, fruit, roots.	I can plant a seed and observe closely (using a magnifying glass) changes over time. I can compare and contrast familiar plants. I can draw and label the basic structure of a plant. I can compare and contrast familiar trees. I can draw and label the basic structure of a tree.	I know and can describe how seeds and bulbs grow into mature plants. *Practical investigation idea: Rising stars – What Shall We Grow?* *CLEAPSS: Make a Micro Propagator.* I know that plants need water, light and a suitable temperature to grow and stay healthy. I know that seeds and bulbs need water to grow but most do not need light. *Practical investigation idea: Rising stars – What Do Seeds Need for Germination?* I know that plants grow and reproduce.		I can observe seeds as they are growing and ask questions. I can set up a comparative test to show that plants need light and water to survive. I can make a simple plan, carry out my test and record the growth of a plant.

Seasonal Changes				
EYFS	**Year 1**		**Year 2**	
	Knowledge	Working Scientifically	Knowledge	Working Scientifically
I know that we dress accordingly to keep ourselves safe/comfortable. I knows the 5 senses and can describe things using them. I know and recognises some signs of Autumn, Winter, Spring and Summer.	**Autumn** I know the order of the 4 seasons. I know the changes to plants in autumn. I know that leaves change colour and fall from deciduous trees in autumn. I know why these changes happen in autumn; leaves fall to protect the tree. I know that the days are beginning to get shorter. I know what sort of weather is typical. **Winter** I know that most plants are dormant in winter. I know evergreen trees still have leaves in winter. I know why these changes happen in winter. I know that the days are short and it gets dark early. I know what sort of weather is typical. **Spring** I know that plants and seeds begin to grow in spring. I know that deciduous trees begin to grow new leaves or blossom. I know why these changes happen in spring I know that the days are beginning to get longer. I know what sort of weather is typical. **Summer** I know that plants get larger and flower. I know that trees are full leaf.	I can observe and describe the changes in weather.	Strand not taught in Year 2	Strand not taught in Year 2

	I know why these changes happen in Summer. I know that the days are long. I know what sort of weather is typical.			
Living Things and their Habitats
Our local environment – Spring 1
EYFS	**Year 1**	**Year 2**
	Knowledge	Working Scientifically	Knowledge	Working Scientifically
I know about different habitats.	Strand not taught in Year 1	Strand not taught in Year 1	I know that some things are living, some things are dead and some things have never been alive. I know what a habitat is and that most living things live in habitats. I know a habitat provides basic needs: food, water, warmth, shelter and air. I know that a micro habitat is a vey small habitat with plants and animals living there. I know how the conditions in a micro habitat affect the number and types of plants and animals that live there. *Practical investigation idea: Rising stars – Animals and Plants in Different Habitats.* I know that a food chain shows who is eaten by whom. I know the meaning of the words predator and prey.	I can sort into groups of alive, dead and never been alive. I can identify a range of micro habitats around school. I can gather and record my observations. I can describe the conditions in different micro habitats e.g under log, on stony path. I can create a 3-part food chain.

				I can apply my knowledge of a food chain to a micro habitat.