

Maple Year A Autumn	Prior Knowledge	Knowledge to be explicitly taught	How the knowledge will be built on
Substantive Knowledge	In EYFS: - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter	Perform simple tests with support e.g. What material is best to make a boat? Know whether the test has been successful and can say what has been learned. To make simple predictions with support e.g. I think the boat will sink Ask simple questions and recognise that they can be answered in different ways e.g. By testing or by looking up Use simple equipment to observe closely including the use of magnifying glass and simple scaled rulers Gather and record data to help in answering questions Make a simple written explanation about what has been learned from an investigation or what conclusions have been found.	In Willow: <ul style="list-style-type: none"> • 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.
Disciplinary Knowledge		Everyday materials <ul style="list-style-type: none"> • 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 • 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 	
VOCAB		wood, plastic, glass, paper, metal, rock, hard, soft, rough, smooth, shiny, dull, bendy, stiff, brick, fabric, elastic, foil, property, solid, waterproof, absorbent, opaque, transparent, squash, bend, flexible, twist, stretch push, pull, roll, slide, bounce	
Learning Objective	<ol style="list-style-type: none"> 1. To know the name of different everyday materials 2. To distinguish between an object and the material from which it is made 3. To describe the simple properties of wood, glass and metal 4. To describe the simple properties of plastic, water and rock 5. To compare and group everyday materials based on their properties 6. To compare and group everyday objects based on their material properties 7. To investigate: What would be the best material for a boat?- planning what we will do, starting the experiment 8. To investigate: What would be the best material for a boat?- finishing the experiment and concluding our findings 9. To investigate: What would be the best material for curtains? - planning what we will do, starting the experiment 10. To investigate: What would be the best material for curtains? - finishing the experiment and concluding our findings 11. To investigate: what material makes the best bags? - planning what we will do, starting the experiment 12. To investigate: what material makes the best bags? - finishing the experiment and concluding our findings 		

Maple Year A Spring	Prior Knowledge	Knowledge to be explicitly taught	How the knowledge will be built on
Substantive Knowledge	In EYFS: Explore the natural world around them, making observations and drawing pictures of animals and plants;	Ask simple questions and recognise that they can be answered in different ways e.g. By testing or by looking up Identify and group according to a given criteria e.g. Deciduous and coniferous trees To use observations to notice similarities and differences	In Willow: • Talk about criteria for grouping, sorting and classifying; and use simple keys
Disciplinary Knowledge	- 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;	Animals including humans • 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. • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • Identify and name a variety of common animals that are carnivores, herbivores and omnivores • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	• Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations • Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them
VOCAB		amphibians, fish, reptiles, mammals, birds, herbivore, omnivore, carnivore, head, nose, ear, neck, shoulder, arm, elbow, wrist, hand, back, chest, hip, leg, knee, ankle, foot wing, beak, tail, fin sight, smell, touch, taste, hearing, food chain, prey, predator, camouflage, protection exercise, hygiene, balanced diet	
Learning Objective			

1. To name common animals offspring
2. To notice the changes in humans from offspring to adult.
3. To find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
4. To describe the importance for humans of exercise and hygiene.
5. To describe the importance for humans of eating the right amounts of different types of food.
6. To identify and name a variety of common animals including fish, amphibians, reptiles
7. To identify and name a variety of common animals including birds and mammals
8. To identify and name animals that are carnivores, omnivores and herbivores
9. To describe the structure of fish, amphibians and reptiles To describe the structure of birds and animals
10. To compare the structure of common animals
11. To identify the parts of the human body
12. To identify the parts of the human body associated with each sense

Maple Year A Summer 1	Prior Knowledge	Knowledge to be explicitly taught	How the knowledge will be built on
Substantive Knowledge	<p>In EYFS: 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;</p>	<p>Perform simple tests with support e.g. What material is best to make a boat? Know whether the test has been successful and can say what has been learned. To make simple predictions with support e.g. I think the boat will sink Ask simple questions and recognise that they can be answered in different ways e.g. By testing or by looking up Use simple equipment to observe closely including the use of magnifying glass and simple scaled rulers Identify and group according to a given criteria e.g. Deciduous and coniferous trees To use observations to notice similarities and differences</p>	<p>In Willow: • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations • Make systematic and careful observations • Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used • Begin to look for naturally occurring patterns and relationships and decide what data to collect to identify them</p>
Disciplinary Knowledge		<p>Plants yr 1 – extend range of known plants compare and contrast plants focusing on structure of plants.</p> <ul style="list-style-type: none"> • 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 <p>Plants year 2 – what plants need to grow how seeds grow into plants Observe and describe how seeds and bulbs grow into mature plants</p> <ul style="list-style-type: none"> • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	
VOCAB		<p>deciduous, evergreen, tree, leaf, flower (blossom), petals, fruit, bulb, seed, roots, stem, trunk, branches, growth, germinate, light, temperature reproduce, lifecycle</p>	
Learning Objective	<ol style="list-style-type: none"> 1. To name a variety of wild plants 2. To name a variety of garden plants 3. To name a variety of deciduous trees 4. To name a variety of evergreen trees 5. To describe the basic structure of flowering plants 6. To describe the basic structure of trees. 		