



# Singleton Church of England Primary School

## Progression of knowledge

### Science - Y2 (Cycle A)



	Year 2 – Unit 1 Materials Monster	Year 2 – Unit 2 Little Master Chefs	Year 2 – Unit 3 On Safari
<b>SUBSTANTIVE CONCEPTS</b> Substantive concepts are concepts that children will come across repeatedly throughout their education in Science	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space
<b>KEY VOCABULARY</b>	opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching	growth, baby, toddler, child, teenager, adult, old person, names of animals and their babies, survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats, names of micro-habitats, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied
<b>SUBSTANTIVE KNOWLEDGE</b> Substantive knowledge refers to the residual knowledge that children should take away from the unit after it has been taught. It consists of the core facts in terms of Scientific knowledge. In this progression map, you will find a concise summary of the substantive knowledge for each unit.	<ul style="list-style-type: none"><li>Knows and can compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li><li>Knows how to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li></ul>	<ul style="list-style-type: none"><li>Knows about the basic needs of animals, including humans, for survival (water, food and air).</li><li>Knows the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li></ul>	<ul style="list-style-type: none"><li>Knows a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li><li>Knows a variety of common animals that are carnivores, herbivores and omnivores.</li><li>Knows how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li><li>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li></ul>
<b>MAKING CONNECTIONS</b> <b>Key knowledge</b>	<b>Year 1</b> <ul style="list-style-type: none"><li>Knows the difference between an object and the material from which it is made.</li><li>Knows a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li><li>Knows the simple physical properties of a variety of everyday materials.</li><li>Knows how to compare and group together a variety of everyday materials on the basis of their simple physical properties.</li></ul>	<b>Year 1</b> <ul style="list-style-type: none"><li>Knows a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li><li>Knows a variety of common animals that are carnivores, herbivores and omnivores.</li><li>Knows how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li><li>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li></ul>	<b>Year 1</b> <ul style="list-style-type: none"><li>Knows a variety of common animals including fish, amphibians, reptiles, birds and mammals.</li><li>Knows a variety of common animals that are carnivores, herbivores and omnivores.</li><li>Knows how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</li><li>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li></ul>

	<b>Year 3</b> <ul style="list-style-type: none"><li>• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</li><li>• Knows in simple terms how fossils are formed when things that have lived are trapped within rock.</li><li>• Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</li></ul>	<b>Year 3</b> <ul style="list-style-type: none"><li>• Knows that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</li><li>• Knows that humans and some other animals have skeletons and muscles for support, protection and movement.</li></ul>	<b>Year 3</b> <ul style="list-style-type: none"><li>• Knows that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</li><li>• Knows that humans and some other animals have skeletons and muscles for support, protection and movement.</li></ul>
<b>Working Scientifically</b>	<ul style="list-style-type: none"><li>• Observe closely.</li><li>• Perform simple tests.</li><li>• Identify and classify.</li><li>• Use observations and ideas to suggest answers to questions.</li><li>• Gather and record data to help in answering questions</li></ul>	<ul style="list-style-type: none"><li>• Perform simple tests</li><li>• Using their observations and ideas to suggest answers to questions</li><li>• Gather and record data to help answering questions</li></ul>	<ul style="list-style-type: none"><li>• Observe closely, using simple equipment</li><li>• Ask simple questions and recognise that they can be answered in different ways</li></ul>