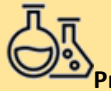
St Michael's Primary School Science Curriculum Progression: Biology					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Plants					
• Identify and name a variety of common plants • Identify and describe the structure of common plants	• Observe and describe how seeds and bulbs grow • Find out and describe what plants need to stay healthy	• Identify and describe the functions of parts of different flowering plants • Explore the requirements of plants for life and growth • Investigate the way in which water is transported • Explore the part that flowers play in the life cycle of flowering plants			
Living things and their habitats					
	• Explore and compare things that are living, dead and never been alive • Identify and describe animal habitats and what they provide • Identify a variety of plants and animals in their habitats • Describe how animals obtain their food from plants and other animals		• Recognise that living things can be grouped in different ways • Explore and use classification keys • Recognise that environments can change and pose dangers to living things	• Describe the differences in the life cycles of a mammal, amphibian, insect and bird • Describe the life process of reproduction in some plants and animals	• Describe how living things are classified into broad groups; including micro-organisms • Give reasons for classifying plants and animals based on specific characteristics

St Michael's Primary School Science Curriculum Progression: Biology					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
 **Animals, including humans**					
• Identify and name a variety of common animals • Identify and name common carnivores, omnivores and herbivores • Describe and compare the structure of common animals • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	• Notice that animals have offspring that grow into adults • Find out about and describe the basic needs of animals for survival • Describe the importance for humans of exercise, diet and hygiene	• Identify that animals need the right type of nutrition and cannot make their own food • Identify that humans and some animals have skeletons and muscles for support, protection and movement	• Describe the simple functions of the basic parts of the digestive system in humans • Identify the different types of teeth in humans and their functions • Construct and interpret a variety of food chains, identifying producers, predators and prey	• Describe the changes as humans develop to old age	• Identify and name the main parts of the human circulatory system and describe their functions • Recognise the impact of diet, exercise, drugs and lifestyle on the body • Describe the ways in which nutrients and water are transported within animals.

St Michael's Primary School Science Curriculum Progression: Biology					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Evolution and Inheritance					
					• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

St Michael's Primary School Science Curriculum Progression: Chemistry

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
 **Everyday Materials**		 **Rocks and Soils**	 **Properties and Changing States**		
• Distinguish between an object and the material it is made from. • 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 properties.	• Identify and compare the uses 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.	• Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. • Describe in simple terms how fossils are formed when things that have lived are trapped inside rock. • Recognise that soils are made from rocks and organic matter.	• Compare and group materials together, according to whether they are solids, liquids or gases. • Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius. • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	• Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. • Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. • Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. • Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metal, wood and plastic. • Demonstrate that dissolving, mixing and changes of state are reversible changes. • Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	

St Michael's Primary School Science Curriculum Progression: Physics					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
 **Forces and magnets**					
		• Compare how things move on different surfaces. • Notice that some forces need contact between two objects, but magnetic forces can act at a distance. • Observe how magnets attract or repel each other and attract some materials and not others. • Compare and group a variety of everyday materials that are attracted to a magnet, and identify some magnetic materials. • Describe magnets as having two poles. • Predict whether two magnets will attract or repel each other, depending on which poles are facing.		• Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. • Identify the effects of air resistance, water resistance and friction, that act between moving surfaces. • Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	

St Michael's Primary School Science Curriculum Progression: Physics					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
 **Light**					
		• Recognise that they need light in order to see things and that dark is the absence of light. • Notice that light is reflected from surfaces. • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. • Recognise that shadows are formed when the light from a light source is blocked by a solid object. • Find patterns in the way that the size of shadows change.			• Recognise that light travels in a straight line. • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

St Michael's Primary School Science Curriculum Progression: Physics					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Electricity					
			• Identify common appliances that run on electricity. • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. • Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a series circuit. • Recognise some common conductors and insulators, and associate metals with being good conductors.		• Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. • Use recognised symbols when representing a simple circuit in a diagram.

St Michael's Primary School Science Curriculum Progression: Physics					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
 **Sound**					
			• Identify how sounds are made, associating some of them with something vibrating. • Recognise that vibrations from sounds travel through a medium to the ear. • Find patterns between the pitch of a sound and features of the object that produced it. • Find patterns between the volume of a sound and the strength of the vibrations that produced it. • Recognise that sounds get fainter as the distance from the sound source increases.		

St Michael's Primary School Science Curriculum Progression: Physics					
Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
 **Earth and Space**					
• Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length varies.				• Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. • Describe the movement of the Moon relative to the Earth. • Describe the Sun, Earth and Moon as approximately spherical bodies. • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	

St Michael's Primary School Science Curriculum Progression: Science in the EYFS			
EYFS Area	**30-50 months**	**40-60 months**	**Early Learning Goal**
Understanding the world: the world 	• Comment and ask questions about aspects of their familiar world, such as the place where they live or the natural world. • Talk about some of the things they have observed, such as plants, animals, natural and found objects. • Talk about why things happen and how things work. • Develop an understanding of growth, decay and changes over time. • Show care and concern for living things and the environment.	• Look closely at similarities, differences, patterns and change.	• **Know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another.**
Physical Development: health and self-care 	• Observe the effects of physical activity on their bodies.	• Eat a healthy range of foodstuffs and understand a need for variety in food. • Show some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health.	• **Know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe.**

St Michael's Primary School Science Curriculum Progression: Working Scientifically		
Year 1 and Year 2	Year 3 and Year 4	Year 5 and Year 6
Exploring, talking about, asking questions, choosing how to enquire		
• Asking simple questions and recognising they can be answered in different ways	• Asking relevant questions and using different types of scientific enquiries to answer them	• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
Investigating, observing, gathering and recording data		
• Observing closely using simple equipment • Performing simple tests • Identifying and classifying • Gathering and recording data to help in answering questions	• Setting up practical enquiries, comparative and fair tests • Making systematic and careful observations, and where appropriate, taking accurate measurements using standard units, using a range of equipment including thermometers and data loggers • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables	• Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs
Reporting and drawing conclusions, making predictions, asking new questions		
• Using their observations and ideas to suggest answers to questions	• Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identifying differences, similarities or changes related to simple scientific ideas and processes • Using straightforward scientific evidence to answer questions or to support their findings	• Using test results to make predictions to set up further comparative and fair tests • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or arguments