

Overview of Investigations at St Michael's

Year 1

	Materials	Plants and Trees	Seasons	Animals Including Humans
Comparative/Fair Tests	Testing Materials for different properties		Does the amount of rain change across the seasons?	
Research				
Observations Over Time			How does the temperature change across a year? Does the amount of rain change each season?	
Pattern Seeking		Is there a pattern to where we find moss growing in the school grounds?	Does the wind always blow the same way?	Do the oldest children have the longest feet?
Identifying, Grouping and Classifying	Group materials according to their properties	Group plants and Trees according to their properties (plants or trees/ evergreen or deciduous)		Groups animals into groups (mammals/reptiles/birds etc) Group animals into carnivores/herbivores/omnivores

Year 2

	Materials	Living Things and Their Habitats	Plants and Trees	Animals Including Humans
Comparative/Fair Tests	Testing Materials for different properties Investigating which material is the most stretchy Investigating which materials are waterproof		Do plants grow healthier in the light or dark?	
Research		Research which animals live in different habitats		Research what animals need to survive
Observations Over Time			Observe the changes in seeds as they grow	How much food and drink do I have over a week?
Pattern Seeking		Which microhabitat do _____ prefer? Where do we find the most minibeasts in school?		
Identifying, Grouping and Classifying	Group materials according to their properties	Group Living things according to their characteristics (dead or alive) Group animals into habitats		

Year 3

	Forces and Magnets	Rocks and Soils	Plants	Light	Animals Including Humans
Comparative/Fair Tests	Investigating different surfaces on distance travelled	To investigate which soil absorbs the most water	How does the number of seeds affect plant growth	Does the distance from a light source affect the size of a shadow?	
Research					Research animal diets
Observations Over Time			What happens to celery when it is left in a glass of coloured water?	Is the sun the same brightness all day?	
Pattern Seeking	Does the size and shape of a magnet affect how strong it is?				
Identifying, Grouping and Classifying	Group materials according to whether they are magnetic or not	Group rocks according to their properties		Group materials according to whether they are opaque, translucent or transparent Group materials by whether they are light sources	Group food into their food groups

Year 4

	Electricity	Sound	Living Things and Their Habitats	States of Matter	Animals Including Humans
Comparative/Fair Tests	To investigate what affects bulb brightness	To investigate the relationship between volume and distance			
Research			Research a human impact e.g deforestation on habitats	Research Climate change	
Observations Over Time		When is our classroom the quietest?		Observe how temperature changes over time (melting and boiling) How does the level of water change in a glass when left on the windowsill?	Observe the impact of drinks on teeth (eggshells)
Pattern Seeking		Is there a link between how loud it is in school and the time of day? If there is a pattern, is it the same in every area?		Is there a pattern in how long it takes different ice lollies to melt?	
Identifying, Grouping and Classifying	Grouping materials to whether they are conductors or insulators		Group living things in different ways (vertebrates/invertebrates) (reptiles/mammals/amphibians etc) (worms/spiders/insects) Using classification keys	Group materials as to whether they are solids, liquids or gases	

Year 5

	Forces	Materials	Earth and Space	Animals Including Humans	Living Things and their Habitats
Comparative/Fair Tests	Does the size of a parachute affect the time it takes for it to fall to the ground?	To investigate thermal conductors and insulators			
Research	Streamlined animals in relation to water resistance.		Research facts about the planets		Research different animal lifecycles
Observations Over Time		How does a sugar cube change as it is put in a glass of water?	Observe how the moon changes over time Observe how the sun 'moves' across the sky		How the growing food grows food over time
Pattern Seeking	Do all objects fall through water the same way?			Is there a relationship between a mammal's size and their gestation period?	
Identifying, Grouping and Classifying		Grouping materials according to their properties: hardness, transparency, conductivity Grouping materials according to whether they are soluble or insoluble			

Year 6

	Evolution and Inheritance	Living Things and Their Habitats	Electricity	Animals Including Humans	Light
Comparative/Fair Tests			To investigate how voltage affects bulb brightness	To investigate how exercise impacts heart rate	To investigate the relationship between distance and shadows
Research	Research Charles Darwin and his theory. Research adaptations in animals	Who was Carl Linneus?	Renewable energy sources	Researching healthy food choices	
Observations Over Time		What happens to a piece of bread if you leave on the window?		How does my heart rate change over the day? How much exercise do I do in a week?	How does my shadow change over the day?
Pattern Seeking	Is there a pattern between the size and shape of a bird's beak and the food it will eat?			Is there a pattern between what we eat for breakfast and how fast we run?	
Identifying, Grouping and Classifying	Group species by variation (e.g. fur colour/ wingspan)	Categories and group living things into a broad range of categories Use and create classification systems to identify plants/animals/microorganisms			