

	Eastcote Primary Academy - Science Coverage Map							
	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6		
Nursery and Reception								
base note: Early Years use the EYFS Framework and do not engage in subject specific study. They are building pre-requisite foundational skills that will allow them to be scientists in the future. Through 'Understanding the World' we are guiding children to make sense of their physical world.								
Please see EYFS Curriculum Overview for Reception and Nursery for further information								
YEAR 1								
Focus for study:	Seasons/Weather in UK - locational knowledge, physical geography	Toys - place knowledge	Habitats - locational, place knowledge	Transport - human geography, map skills	School/Local area study - map and field work skills	Seaside - locational, place knowledge and human and physical geography		
Core Knowledge:	Seasonal Changes Observe the changes of the four seasons Observe and describe weather associated with the seasons and how day length varies	Materials 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.	Animals including Humans 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, mammals, including pets) Identify, name, draw and label basic parts of the human body and say which part of the body is associated with which sense.	Plants 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	Seasonal Changes	Seasonal Changes		
YEAR 2								
Focus for study:	Fire of London - place knowledge	Polar Expedition - locational knowledge, physical geography, enquiry	Florence Nightingale - locational knowledge	Locality - Fieldwork and map skills and human and physical geography	Materials - human geography and climate change	Africa - place knowledge and fieldwork skills (linking to local area)		
Core Knowledge:	Living things and their habitats -Explore and compare the differences between things that are living, dead and things that have never been alive. -Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, including microhabitats -Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Living things and their habitats -Explore and compare the differences between things that are living, dead and things that have never been alive. -Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, including microhabitats -Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Animals including humans Notice that animals, including humans, have offspring which grow into adults Find out 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	Plants Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and suitable temperature to grow and stay healthy	Uses of Everyday Materials 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 stretch			
YEAR 3								
Focus for study:	Stone to Iron Age - locational knowledge, map skills	Natural disasters - physical geography, locational knowledge	Egyptians - place and locational knowledge, map skills	Local area study - map and fieldwork skills, geographical enquiry	Human Rights - human geography	Europe - place and locational knowledge		

Core Knowledge:	Rocks and Soils	Forces and Magnets	Animals including humans	Plants		Light and shadows		
	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	Compare how things move on different surfaces	Identify 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	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers		Recognise the need for light in order to see things and that dark is the absence of light		
	Describe in simple terms how fossils are formed when things that have lived are trapped within rock	Notice that some forces need contact between two objects, but magnetic forces can act at a distance		Explore the requirements for life and growth (air, water, nutrients from soil, and room to grow) and how they vary from plant to plant		Notice that light is reflected from surfaces		
	Recognise that soils are made from rocks and organic matter	Observe how magnets attract or repel each other and attract some materials and not others	Identify that humans and some other animals have skeletons and muscles for support, protection and movement	Investigate the way in which water is transported within plants		Recognise that light from the sun can be dangerous and that there are ways to protect their eyes		
		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		Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersa		Recognise that shadows are formed when light from a source is blocked by an opaque object		
	Describe magnet as having two poles					Find patterns in the way that the size of shadows chan		
	Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.							
YEAR 4								
Focus for study:	Romans in Britain - locational knowledge, human, physical geography	Cities - human geography, map skills, locational knowledge	Anglo Saxons - locational knowledge, human and physical geography	Rivers - physical geography, map and fieldwork skills	Vikings - locational knowledge, human and physical geography	UK/Italy comparison - place and locational knowledge		
Core Knowledge:	States of Matter	Animals including Humans	Electricity	Living things and their habitats	Sound			
	Compare and group materials together, according to whether they are solids liquids or gases	Describe the simple functions of the basic parts of the digestive system in humans	Identify common appliances that run on electricity	Recognise that living things can be grouped in a variety of ways	Identify how sounds are made, associating some of them with something vibrating			
	Observe that some materials change state when they are heated, cooled and measure or research the temperature at which this happened in degrees (Celsius)	Identify the different types of teeth in humans and their simple functions	Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	Recognise that vibrations from sounds travel through a medium to the ear			
	Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Construct and interpret a variety of food chains, identifying producers, predators and prey.	Identify whether or not a lamp will light in a series circuit, based on whether or not the lamp s part of a complete loop with a battery	Recognise that environments can change and this this can sometimes pose dangers to living things	Find patterns between the pitch of a sound and features of the object that produced it			
			Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.		Find patterns between the volume of a sound and the strength of the vibrations that produced it			
		Recognise some common conductors and insulators, and associate metals with being good conductors		Recognise that sounds get fainter as the distance from the sound source increases				
YEAR 5								
Focus for study:	Tudors - the impact of leaders - locational knowledge, map skills	Diversity in Britain	Ancient Greece - locational and place knowledge, map skills	South America - trade - human, physical geography, place knowledge	Comparing civilizations (Mayan/Anglo Saxon) - physical and human geography	Solar system - map skills, Local study - human geography, fieldwork skills		

Core Knowledge:	<p>Changes In materials Properties of materials</p> <p>Know that some materials will dissolve in a liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including filtering, sieving and evaporating</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>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 bicarbonates of soda.</p>	<p>Animals including Human</p> <p>Describe the changes as humans develop into old age.</p>	<p>Living Things and their Habitats</p> <p>Describe the differences in the life cycle of a mammal, an amphibian, an insect and a bird</p> <p>Describe the life process of reproduction in some plants and animals</p>	<p>Forces</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</p> <p>Identify the effects of air resistance and friction, that act between moving surfaces</p> <p>Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</p>		<p>Earth and space</p> <p>Describe the movement of the moon relative to the Earth</p> <p>Describe the sun, Earth and moon as approximately spherical bodies</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky</p>		
YEAR 6								
Focus for study:	Industrial revolution - human geography	Electricity - physical geography, locational knowledge	Democracy and Justice - human geography, locational knowledge	North America - place knowledge, human and physical geography	World War 2 - human and physical geography, locational knowledge	PYP Exhibition - geographical enquiry, fieldwork - improving the environment		
Core Knowledge:	<p>Light</p> <p>Recognise that light appears to travel in straight lines.</p> <p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light</p> <p>explain that we see things because light travels from light sources to our eyes, to objects and then to our eyes.</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as objects that cast them.</p>	<p>Electricity</p> <p>Associate the brightness of a bulb or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p>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</p> <p>Use recognised symbols when representing a simple circuit diagram.</p>	<p>Animals including Humans</p> <p>Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood</p> <p>Recognise the impact of diet, exercise on the way their bodies function</p> <p>Describe the ways in which nutrients and water are transported within animals including humans,</p>	<p>Living Things and their Habitats</p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms and plants</p> <p>give reasons for classifying plants and animals based on specific characteristics</p>		<p>Evolution and Inheritance</p> <p>recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>Recognise that living things produce offspring of some kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how plants and animals are adapted to suit their environments in different ways and that adaptation may lead to evolution.</p>		