YEAR 5: END POINTS

Year 5					
Biology		Chemistry	Physics		
All living things and their habitats	Animals, including humans	Properties and changes in materials	Forces	Earth and Space	
Life cycles – plants and animals Reproductive processes Famous naturalists	Changes as humans develop from birth to old age	 Compare properties of everyday materials Soluble/ dissolving Reversible and irreversible substances 	Gravity Friction Forces and motion of mechanical devices	Movement of the Earth and the planets Movement of the Moon Night and day	
Know the life cycle of different living things e.g. mammal, amphibian, insect and bird Know the differences between different life cycles Know the process of reproduction in plants Know the process of reproduction in animals	Create a timeline to indicate stages of growth in humans	Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets Know and explain how a material dissolves to form a solution Know and show how to recover a substance from a solution Know and demonstrate how some materials can be separated (e.g. through filtering, sieving and evaporating) Know and demonstrate that some changes are reversible and some are not Know how some changes result in the formation of a new material and that this is usually irreversible	Know what gravity is and its impact on our lives Identify and know the effect of air and water resistance Identify and know the effect of friction Explain how levers, pulleys and gears allow a smaller force to have a greater effect	Know about and explain the movement of the Earth and other planets relative to the Sun Know about and explain the movement of the Moon relative to the Earth Know and demonstrate how night and day are created Describe the Sun, Earth and Moon (using the term spherical)	

	Year 5					
Working Scientifically						
	Set up an investigation when it is appropriate e.g. finding out which materials dissolve or not		Able to present information related to scientific enquiries in a range of ways including using IT such as power-point and iMovie			
	Set up a fair test when needed e.g. which surfaces create most friction?		Use diagrams, as and when necessary, to support writing			
	Set up an enquiry based investigation e.g. find out what adults / children can do now that they couldn't when a baby		Is evaluative when explaining findings from scientific enquiry			
	Know what the variables are in a given enquiry and can isolate each one when investigating e.g. finding out how effective parachutes are when made with different materials		Clear about what has been found out from recent enquiry and can relate this to other enquiries, where appropriate			
	Use all measurements as set out in Year 5 mathematics (measurement), including capacity and mass		Their explanations set out clearly why something has happened and its possible impact on other things			
	Use other scientific instruments as needed e.g. thermometer, rain gauge, spring scales (for measuring Newtons)		Able to give an example of something focused on when supporting a scientific theory e.g. how much easier it is to lift a heavy object using pulleys			
	Able to record data and present them in a range of ways including diagrams, labels, classification keys, tables, scatter graphs and bar and line graphs		Keep an on-going record of new scientific words that they have come across for the first time			
	Make predictions based on information gleaned from investigations		Able to relate causal relationships when, for example, studying life cycles			
	Create new investigations which take account of what has been learned previously		Frequently carry out research when investigating a scientific principle or theory			