YEAR 6: END POINTS

Year 6					
Biology			Physics		
Animals, including humans	All living things and their habitats	Evolution and Inheritance	Electricity	Light	
 The circulatory system Water transportation Impact of exercise on body 	 Classification of living things and the reasons for it 	 Identical and non identical off-spring Fossil evidence and evolution Adaptation and evolution 	 Electrical components Simple circuits Fuses and voltage 	 How light travels Reflection Ray models of light 	
 Identify and name the main parts of the human circulatory system Know the function of the heart, blood vessels and blood Know the impact of diet, exercise, drugs and lifestyle on health Know the ways in which nutrients and water are transported in animals, including humans 	 Classify living things into broad groups according to observable characteristics and based on similarities and differences Know how living things have been classified Give reasons for classifying plants and animals in a specific way 	 Know how the Earth and living things have changed over time Know how fossils can be used to find out about the past Know about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents) Know how animals and plants are adapted to suit their environment Link adaptation over time to evolution Know about evolution and can explain what it is 	 Compare and give reasons for why components work and do not work in a circuit Draw circuit diagrams using correct symbols Know how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer 	 Know how light travels Know and demonstrate how we see objects Know why shadows have the same shape as the object that casts them Know how simple optical instruments work e.g. periscope, telescope, binoculars, mirror, magnifying glass etc. 	

	Year 6					
Working Scientifically						
	Know which type of investigation is needed to suit particular scientific enquiry e.g. looking at the relationship between pulse and exercise		Use a range of written methods to report findings, including focusing on the planning, doing and evaluating phases			
	Set up a fair test when needed e.g. does light travel in straight lines?		Clear about what has been found out from their enquiry and can relate this to others in class			
	Know how to set up an enquiry based investigation e.g. what is the relationship between oxygen and blood?		Explanations set out clearly why something has happened and its possible impact on other things			
	Know what the variables are in a given enquiry and can isolate each one when investigating		Aware of the need to support conclusions with evidence			
	Justify which variable has been isolated in scientific investigation		Keep an on-going record of new scientific words that they have come across for the first time and use these regularly in future scientific write ups			
	 Use all measurements as set out in Year 6 mathematics (measurement), including capacity, mass, ratio and proportion 		Use diagrams, as and when necessary, to support writing and be confident enough to present findings orally in front of the class			
	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		Able to give an example of something they have focused on when supporting a scientific theory e.g. classifying vertebrate and invertebrate creatures or why certain creatures choose their unique habitats			
	Make accurate predictions based on information gleaned from their investigations and create new investigations as a result		Frequently carry out research when investigating a scientific principle or theory			
	Able to present information related to scientific enquiries in a range of ways including using IT such as power-point, animoto and iMovie					