



UKS2: EVEN					
Autumn		Spring		Summer	
Forces in Action	Great British Scientists	Light & Seeing	The Heart & Circulatory System	DARE	Healthy Bodies
Key Vocabulary Gravity, falling, mass, height, shape, weight, friction, resistance, air resistance, pulley, lever, transmission, gear N.C. Y5 PoS	Key Vocabulary Newton, Law of motion, light, gravity, Evolution, inheritance, evolve, bacteria, Fleming, antibiotics, gears, Kemp Curriculum consolidation	Key Vocabulary Shadows, formed, shape, length, eyes, reflect, absorb, retina, cornea, pupil, optic nerve, lens, reflection, mirrors, colour spectrum Curriculum consolidation	Key Vocabulary Heart, circulation, exercise, oxygenated, oxygenated, blood, atrium, valve, capillary artery, left side, right side N.C. Y6 PoS – Animals including humans	Key Vocabulary Food, diet, nutrient, balanced, healthy, nutrients, muscles, medicines, heart rate, tobacco, alcohol, drugs, harmful, side-effects, exercise, circulatory system, lifestyle N.C. Y5 PoS – Animals including humans	
Scientific Concepts		Scientific Concepts		Scientific Concepts	
Systems Interactions Energy		Systems Energy Interactions Diversity		Energy Interactions	

Scientific Knowledge to be covered throughout the year				
Term	Working Scientifically	Biology	Chemistry	Physics
Autumn 1: Forces in Action	Comparative and fair testing <ul style="list-style-type: none"> Y5: Know that some variables need to be controlled. Y5: Know that results can lead to further prediction and the design of further comparative tests. Y5: Know that methods can be improved. 			<ul style="list-style-type: none"> 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 effect of drag forces, such as air resistance,



	<ul style="list-style-type: none"> • Y6: Know that there are explanations behind needing to control variables. • Y6: Know that there are reasons for improving methods. • Y6: Know that the correct units must be used when measuring accurately and precisely. <p><u>Identifying and classifying</u></p> <ul style="list-style-type: none"> • Y5: Know that dichotomous classification models can be used to sort living and non-living things 			<p>water resistance and friction that act between moving surfaces.</p> <ul style="list-style-type: none"> • Describe, in terms of drag forces, why moving objects that are not driven tend to slow down. • Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs. • Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect.
<p>Autumn 2: Great British Scientists (Curriculum Consolidation)</p>	<ul style="list-style-type: none"> • Y6: Know that own classification methods [branching & dichotomous] can be chosen and developed in order to sort living and non- living things. 			<ul style="list-style-type: none"> • 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. <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>
<p>Spring 1: Light & seeing</p>	<p><u>Gathering and recording</u></p> <ul style="list-style-type: none"> • Y5: Know that causal relationships can be identified. • Y5: Know that data can be interpreted to find patterns. • Y5: Know that data can be gathered, recorded, classified and presented in 			<ul style="list-style-type: none"> • Understand that light appears to travel in straight lines. • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes. • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes.



	a variety of ways which include scientific diagrams, labels, keys, graphs and tables.			• 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.
Spring 2: The Heart & Circulation system	<ul style="list-style-type: none"> • Y5: Know that repeated and precise recordings must be taken. • Y6: Know that patterns can be found in the natural environment. 	• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.		
Summer 1: DARE	<ul style="list-style-type: none"> • Y6: Know that evidence can support / refute causal relationships 	• Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions.		
Summer 2: Healthy Bodies		<ul style="list-style-type: none"> • Describe the ways in which nutrients and water are transported within animals, including humans. • Describe the changes as humans develop to old age. 		