Curriculum Map Science 24-25

Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
Earth and Space						
Half Term 25 Oct – 5 Nov						
Wk8	Wk9	Wk10	Wk11	Wk12	Wk13	wk14
Forces & Magnets						
Christmas 20 Dec – 3 Jan						
Wk14	Wk15	Wk16	Wk17	Wk18	Wk19	Wk20
Electricity						
Half Term 21 – 25 Feb						
Wk21	Wk22	Wk23	Wk24	Wk25	Wk26	
Plants						
Easter 11 – 22 April						
Wk27	Wk28	Wk29	Wk30			
Rocks						
Half Term 30 May – 3 June						
Wk32	Wk33	Wk34	Wk35	Wk36		
Animals including humans						

Half Term 1

Earth and Space

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
	Spherical Bodies **Working Scientifically**	The Planets **Working Scientifically**	Movement of planets	Night and Day	Night and Day international **Working Scientifically**	**Movement of the moon** **Working Scientifically**	Summative Assessment
1-2	• Describe a sphere • Identify scientific evidence with support.	• Name the planets in the solar system with support.	• Explain how the planets orbit the Sun	• Explain how night and day occur.	• Make predictions about night and day in different places on Earth.	• Explain that the Moon orbits the Earth not the Sun. • Report and present findings from enquiries with support.	Examples: • Quiz • Written Assessment • Practical investigation Visits (to be placed where appropriate): Life Centre Hancock Planetarium
3-4	• Describe the Sun, Earth and Moon as spherical	• Name the planets in the solar system independently	• Distinguish between heliocentric and geocentric ideas of planetary movement.	• Explain that day and night is due to rotation of the Earth.	• Support the idea that different places on Earth experience night and day at different times with evidence. • Report and present findings from enquiries	• Explain how the Moon moves relative to the Earth.	
5-6	• Name at least two different shapes the Earth was thought to be. • Identify scientific evidence that has been used to support or refute ideas.	• Describe some features of the planets. • Place the planets in the solar system in the correct order.	• Explain theories of planetary movement in the solar system using evidence.	• Explain using evidence how night and day occur.	• Explain why night and day occur at different times in different places on Earth. • Write a conclusion which explains my findings.	• Explain how the Earth and Moon move relative to the Sun.	

Half Term 2

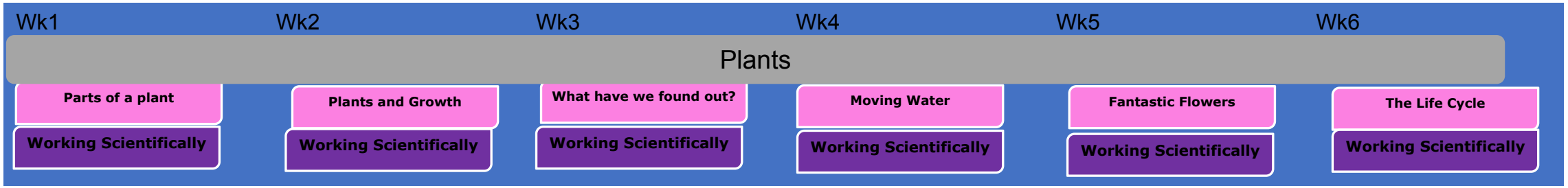
Forces & Magnets

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
	Pushes and Pulls Working Scientifically	Faster and Slower Working Scientifically	Scrapyard Challenge Working Scientifically	Magnet Strength Working Scientifically Discovery Museum	Magnetic Poles Working Scientifically	Marvellous Magnets Working Scientifically	Summative Assessment
1-2	• Identify forces as pushes and pulls	• describe friction as a force that slows objects down	• feel the pulling force of a magnet • sort materials according to whether they are magnetic or not	• participate in an investigation into magnet strength	• identify the different poles of a bar magnet	• identify the different poles of a bar magnet • make a prediction • form a conclusion from their results	Examples: • Quiz • Written Assessment • Practical investigation
3-4	• Identify the type of force required to carry out an action	• investigate the force of friction produced by different surfaces	• explain that magnets produce an invisible pulling force • identify magnetic materials	• identify different types of magnet • investigate the strength of different magnets	• identify when magnets will repel or attract based on their poles • use a magnetic compass with four points	• identify when magnets will repel or attract based on their poles • explain their predictions and conclusions using key words or prompts.	
5-6		• Make generalisations about the types of surfaces that produce the most or least friction	• identify and describe the invisible magnetic field around a magnet • make generalisations about the types of materials that are attracted to magnets		• use a magnetic compass with 8 points	• construct a bar chart of their results • explain their predictions and conclusions.	

Half Term 3

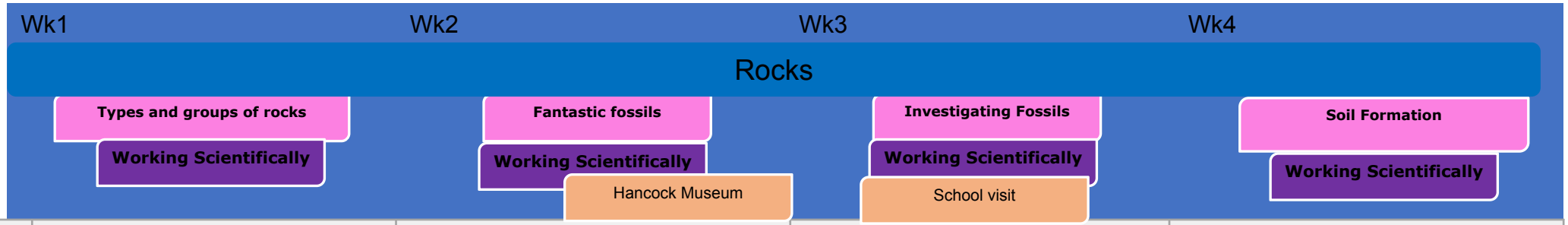
	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7
	Electricity						
	Appliances Working Scientifically	Making Circuits Working Scientifically	Complete Circuits Working Scientifically	Conductors Working Scientifically	Insulators Working Scientifically	Switches Working Scientifically	Electrical Discussions
1-2	define what an electrical appliance is and are starting to identify those that are mains- or battery-powered.	identify different circuit components and begin to describe what they do.	can build series circuits, identifying whether they are complete or incomplete	can explain what electrical conductors are and give some examples of these.	can explain what electrical Insulators are and give some examples of these.	identify some different switches and start to explain how switches work in a circuit.	With support can apply their knowledge of electricity to different situations.
3-4	can define what an electrical appliance is and identify those that are mains- or battery powered.	identify different circuit components and explain what they do.	can build series circuits, identifying and explaining whether they are complete or incomplete.	explain what electrical conductors are and give several examples of these.	explain what electrical insulators are and give several examples of these.	identify several different switches and explain how switches work in a circuit.	apply their knowledge of electricity to different situations
5-6	can define what an electrical appliance is and identify a variety of appliances that are mains- or battery-powered, including more unusual appliances	confidently identify different circuit components and explain what they do. They can explain the terms 'battery' and 'cell'.	confidently build series circuits, identifying and explaining whether they are complete or incomplete. They can independently explain how to make an incomplete circuit complete.	confidently explain what electrical conductors are and give a range of examples of these.	confidently explain what electrical insulators are and give a range of examples of these.	identify a range of different switches and confidently explain how switches work in a circuit	confidently apply their knowledge of electricity to different situations in depth

Half Term 4



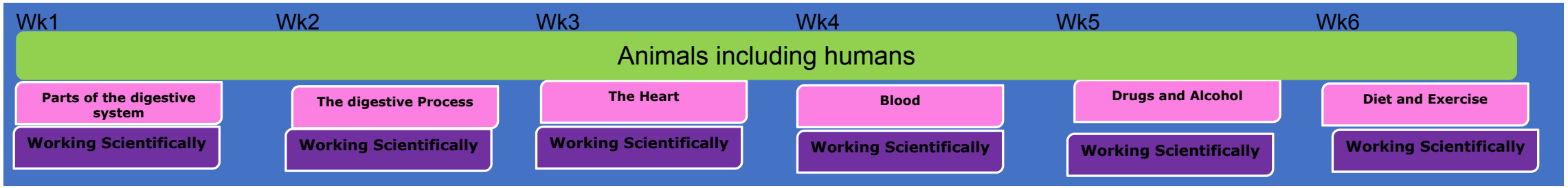
1-2	**identify the different parts of flowering plants: roots, stem/trunk, leaves and flowers**	Identify the some of the different requirements of plants for life and growth	**Record findings using simple drawings, labelled diagrams and bar charts**	**investigate the way in which water is transported within plants**	**explore the part that flowers play in the life cycle of flowering plants, including pollination.**	**Identify the main stages of the life cycle of flowering plants with support**
3-4	identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	Identify several requirements of plants for life and growth	Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables	Investigate and describe the way in which water is transported within plants	Describe the role of parts of flowering plants in the life cycle of flowering plants, including pollination and seed dispersal.	Identify and order the main stages of the life cycle of flowering plants
5-6	Explain the functions of the different parts of plants.	explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant	Report on findings from enquiries, including oral and written explanations and presentations of results and conclusions	investigate and explain the way in which water is transported within plants	Explain the role of parts of flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Describe using key language the main stages of the life cycle of flowering plants.

Half Term 5



1-2	name the three different types of rocks. handle and examine rocks to identify their properties, with support.	describe in simple terms how fossils are formed when things that have lived are trapped within rock	Identifying examples of the different types of fossils in the local area	recognise that soils are made from rocks and organic matter.
3-4	give examples of natural and human-made rocks. group rocks by their properties and identify simple similarities and differences. They will make and record observations accurately.	explain the difference between a bone and a fossil.	Investigate how different fossils are made using examples from local area Simply describe the importance of the field of palaeontology and how animals have changed over time.	explain, using simple scientific language, how soil is formed.
5-6	make systematic observations.	explain the main processes of fossilisation.	Investigate the different formations of fossils and describe how they were formed using examples from the local area. Explain how the field of palaeontology helps in the understanding of evolution.	use simple scientific language accurately in oral and written work.

Half Term 6



1-2	**identify the parts of the digestive system**	Simply describe the journey food takes in the digestive system	**identify the main parts of the heart with support**	**Identify the different blood vessels** Simply describe the role of the blood	Identify different types of drugs and alcohol Simply describe the impact that drugs and alcohol have on the body.	Identify and investigate different types of healthy foods Identify and investigate at least three examples of exercise
3-4	identify the parts of the digestive system and the functions of the basic parts.	Describe the journey food takes in the digestive system	identify and name the main parts of the heart	Identify the different blood vessels and some differences. Describe that blood carries oxygen and carbon dioxide	Identify and name a range of drugs including alcohol. Describe how certain drugs effect the human body	Simply describe a heathy diet using examples of healthy foods Investigate the benefits of different exercises
5-6	Confidently identify all parts of the digestive system and their functions.	Explain how food is digested with reference to the functions.	identify and name the main parts of the human circulatory system, and describe the functions of the heart	Explain the role of blood vessels, Simply describe blood as oxygenated and deoxygenated	Identify and describe the impact drugs and alcohol have on the body's functions.	Explain the benefit of a healthy diet using examples of healthy and unhealthy foods Explain the benefits of exercise using evidence through investigation