Year	Autumn 1		Autu	mn 2	Spr	Spring 1		Spring 2		Summer 1		Summer 2	
EYFS	By the end of EYFS children at the exp - Explore the natural world around th - Know some similarities and differen	he end of EYFS children at the expected level of development will: plore the natural world around them, making observations and drawing pictures of animals and plants; ow some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; destand some important processes and changes in the natural world around them, including the seasons and changing states of matter.											
	All About Me		Seasonal changes		Everyday Materials		Plants		Animals including humans		Seasonal	changes	
	Knowledge	Skills	Knowledge Skills		Knowledge Skills		Knowledge Skills		Knowledge	Skills	Knowledge	Skills	
	To observe things using simple equipment to name the main body parts.	Using their observations and ideas to suggest answers to questions	To observe changes across the four seasons in the context of weather, focusing on Autumn	Observing closely, using simple equipment	To identify common materials.	Identifying and classifying	To follow instructions to plant a seed.	Observing closely, using simple equipment	To identify and name a variety of common animals.	Identifying and classifying	To observe and describe how day length varies from Winter to Spring.	Using their observations and ideas to suggest answers to questions	
	To identify, name, draw and label the basic parts of the human body.	Identifying and classifying	To observe and describe the weather in Autumn.	Using their observations and ideas to suggest answers to questions	To tell the difference between an object and the material it's made out of.	Using their observations and ideas to suggest answers to questions	To identify and name common wild plants.	Identifying and classifying	To identify and name a variety of common UK mammals.	Identifying and classifying	To observe and describe weather in Spring by collecting data.	Using their observations and ideas to suggest answers to questions	
	To gather and record data to compare eye and hair colour.	Gathering and recording data to help in answering questions.	To idefity signs of Autumn.	Identifying and classifying	To describe materials according to their properties.	Using their observations and ideas to suggest answers to questions	To identify the common garden plants.	Identifying and classifying	To identify and compare a variety of UK bird and reptiles.	Identifying and classifying	To idefity signs of Spring/Summer.	Identifying and classifying	
1	Make and use their observations to compare and contrast animals (humans) at first hand. To identify and sort different things To collect and record data to help answer questions.	Gathering and recording data to help in answering questions.	To observe and describe how day length varies in the context of Autumn and Winter.	Observing closely, using simple equipment	To identify which materials have certain properties.	Identifying and classifying	To identify and describe the basic structure of common flowering plants.	Identifying and classifying	To identify and compare a variety of common UK fish and amphibians.	Identifying and classifying	To identify and describe how day length varies in the context of Spring and Summer.	Using their observations and ideas to suggest answers to questions	
	Say which part of the body is associated with each sense. To collect and record data to help answer questions. To identify when we use our senses.	Gathering and recording data to help in answering questions.	To observe and describe the weather in Winter.	Using their observations and ideas to suggest answers to questions	To experiment to find out which materials are waterproof.	Performing simple tests	To identify and classify a range of trees.	Identifying and classifying	To identify and sort carnivores, herbivores and omnivores.	Identifying and classifying	To observe and describe weather in Summer by collecting data.	Gathering and recording data to help in answering questions.	
	Skittles investigation	Performing simple tests	To explain how animals adapt in Winter.	Asking simple questions and recognising that they can be answered in different ways	To sort and identify objects.	Identifying and classifying	To use observations to answer questions about our plants.	Using their observations and ideas to suggest answers to questions	To collect data about animals and answer questions.	Gathering and recording data to help in answering questions.	Explain how to stay safe in the sun.	Using their observations and ideas to suggest answers to questions	
	Plan	ts	Uses of Every	day Materials	Humans and	other Animals	Plants		Living things		Plants		
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	
	To observe closely using simple equipment and use observations to ask questions.	Observing closely, using simple equipment	Identify uses of everyday materials	Identifying and classifying	Describe the changes to animals as they grow.	Identifying and classifying	To observe closely using simple equipment and use observations to ask questions.	Observing using simple equipment, record	Compare the differences between things that are living, dead and have never been alive	Using their observations and ideas to suggest answers to questions	To observe closely using simple equipment and use observations to ask questions.	Observing closely, using simple equipment	
	Observe and describe how seeds and bulbs grow into mature plants by planting seeds and bulbs.	Using their observations and ideas to suggest answers to questions	Identify and classify the uses of everyday materials in the context of the local area.	Identifying and classifying	Identify what to measure to answer a question. Record measurements to find out if the older children in year 2 are taller.	Gathering and recording data to help in answering questions.	Observe and describe how seeds and bulbs grow into mature plants by planting seeds and bulbs.	Using their observations and ideas to suggest answers to questions	Identify and name a variety of plants and animals in their habitats	Identifying and classifying	Observe and describe how seeds and bulbs grow into mature plants by planting seeds and bulbs.	Using their observations and ideas to suggest answers to questions	
2	Observe and describe how seeds and bulbs grow into mature plants by understanding the life cycle of plants.	Observing closely, using simple equipment	Identify and compare the suitability of a variety of everyday materials by exploring the purposes of different objects.	Asking simple questions and recognising that they can be answered in different ways	Identify the ways that different animals meet their basic needs.	Using their observations and ideas to suggest answers to questions	Observe and describe how seeds and bulbs grow into mature plants by understanding the life cycle of plants.	Using their observations and ideas to suggest answers to questions	Describe how different habitats provide for the basic needs of different kinds of animals and plants	Asking simple questions and recognising that they can be answered in different ways	Observe and describe how seeds and bulbs grow into mature plants by understanding the life cycle of plants.	Using their observations and ideas to suggest answers to questions	
	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy by comparing the growth of seedlings under different conditions.	Gathering and recording data to help in answering questions.	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Using their observations and ideas to suggest answers to questions	Describe the importance for humans of eating the right amounts of different types of food	Using their observations and ideas to suggest answers to questions	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy by comparing the growth of seedlings under different conditions.	Using their observations and ideas to suggest answers to questions	Identify and classify by sorting rainforest animals into animal classification groups.	Identifying and classifying	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy by comparing the growth of seedlings under different conditions.	Asking simple questions and recognising that they can be answered in different ways	
	To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Using their observations and ideas to suggest answers to questions	To find out about people who have developed new materials.	Gathering and recording data to help in answering questions.	Find out why humans need to exercise	Asking simple questions and recognising that they can be answered in different ways	To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Gathering and recording data to help in answering questions.	Describe how different habitats provide for the basic needs of different animals and plants, and how they depend on each other	Using their observations and ideas to suggest answers to questions	To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Gathering and recording data to help in answering questions.	
	Describe what plants need to grow and stay healthy.	Performing simple tests	Identify and compare the suitability of a variety of everyday materials for particular uses.	Performing simple tests	Describe the importance of hygiene to humans	Identifying and classifying	Describe what plants need to grow and stay healthy.	Using their observations and ideas to suggest answers to questions	Describe how animals obtain their food from plants and other animals.	Using their observations and ideas to suggest answers to questions	Describe what plants need to grow and stay healthy.	Asking simple questions and recognising that they can be answered in different ways	
	Forces and Magnets		Forces and Magnets Rocks				uding humans		Light and Dark		Plants		
	Knowledge Skills		Knowledge	Skills	Knowledge		Skills		Knowledge	Skills	Knowledge	Skills	
	Forces need contact between two objects	Asking relevant questions and using different types of scientific enquiries to answer them	Explore how different types of rock are formed by using simple scientific language and diagrams	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Identify that humans need the right types and amounts of nutrition		Using straightforward scientific evidence to answer questions or to support their findings.		Name sources of light which allow us to see things	Identifying differences, similarities or changes related to simple scientific ideas and processes	Identify and describe the functions of different parts of flowering plants using simple scientific language	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	
	Compare how things move on different surfaces	Setting up simple practical enquiries, comparative and fair tests	Compare and group together different types of rock based on their simple physical properties	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Identify the right types and amount of nutrition for animals and humans		Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions		Recognise that light from the sun can be dangerous	Using straightforward scientific evidence to answer questions or to support their findings.	Explore the requirements of plants for life and growth	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	
3	Notice that magnetic forces act at a distance labeled diagrams, keys, bar charts, and tables		Describe how fossils are formed	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions		eleton, using labelled diagrams	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables		Understand how light is reflected from surfaces	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables		Using straightforward scientific evidence to answer questions or to	
			Recognise what soil is made from	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	nting data in a variety of ways Observe how skeletons grow as we grow by using accurate me		Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers		Understand how shadows are formed	Setting up simple practical enquiries, comparative and fair tests	the life cycle of a plant	support their findings.	
	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	Identifying differences, similarities or changes related to simple scientific ideas and processes	Set up a simple practical enquiry	Setting up simple practical enquiries,	Sort animals based on their skeleton Understand how muscles help us to move		Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Identifying differences, similarities or changes related to simple scientific ideas and processes		Set up a simple practical enquiry to find patterns in the ways that the size	Gathering, recording, classifying and presenting data in a variety of ways to	Plan and carry out an investigation	Making systematic and careful observations and, where appropriate taking accurate measurements using	
	Describe magnets as having two poles and to predict and observe whether two magnets will attract or repel each other, depending on which poles are facing	Using straightforward scientific evidence to answer questions or to support their findings.	based on the permeability of soil	comparative and fair tests					of shadows change help in answering questions		based on now water is transported in flowers	standard units, using a range of equipment, including thermometers and data loggers	

	Autumn 1 Electricity		Autumn 2 Sound		Sp	Spring 1		Spring 2		Summer 1		Summer 2	
					States of Matter		Notable Scientists		Animals including Humans		Living things and their Habitats		
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	
,	Explain that there are different types of electricity	Using straightforward scientific evidence to answer questions or to support their findings.	Describe and explain sound sources	Using straightforward scientific evidence to answer questions or to support their findings.	Sort and describe materials	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	Who is Katharine Johnson? Katharine Johnson's life story and contributions to science Investigating trajectories of flight NASA	Research, describe, prior knowledge	Identify and name parts of the human digestive system	Identifying differences, similarities or changes related to simple scientific ideas and processes	Group living things in a range of ways	Identifying differences, similarities changes related to simple scientif ideas and processes	
	Identify electrical appliances and the types of electricity they use	Identifying differences, similarities or changes related to simple scientific ideas and processes	Explain how different sounds travel	Identifying differences, similarities or changes related to simple scientific ideas and processes	Investigate gases and explain their properties	Asking relevant questions and using different types of scientific enquiries to answer them	Who is Alexander Graham Bell? Life story and contributions to science Invention of the telephone Deafness Patents	Research, present findings, revisit learning	Explain the functions of the digestive system	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Identify vertebrates by observing their similarities and differences	Using straightforward scientific evidence to answer questions or support their findings.	
	Identify complete and incomplete circuits	Setting up simple practical enquiries, comparative and fair tests	Explore ways to change the pitch of a sound	Setting up simple practical enquiries, comparative and fair tests	Investigate materials as they change state	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Who is Rachel Carson? Life story and contributions to science Pesticides Writing a letter about an environmental cause	e Research, present findings	Identify the types and functions of teeth	Identifying differences, similarities or changes related to simple scientific ideas and processes	Use evidence to identify an invertebrate	Recording findings using simp scientific language, drawings, lab diagrams, keys, bar charts, and ta	
	Identify and sort materials into electrical conductors or insulators	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Explain how different sounds travel	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Explore how water changes state	Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Who is George Washington Carver? Life story and contributions to science Crop rotation importance of agriculture	2 Research, present findings	Ask scientific questions and choose a scientific enquiry to answer them	Setting up simple practical enquiries, comparative and fair tests	Create a classification key; show the characteristics of living things in a table and a key	Gathering, recording, classifying presenting data in a variety of wa help in answering questions	
	Explain how a switch works and why they are needed	Using straightforward scientific evidence to answer questions or to support their findings.	Explain how different sounds travel; investigate ways to absorb sound	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	Investigate how water evaporates	Setting up simple practical enquiries, comparative and fair tests	Who is Stephen Hawking? Ife story and contributions to scienc The big bang Black holes Being a science presenter	Ce Research, present findings	Careful observations, appropriately record my results and use them to develop further investigations	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Recognise positive and negative changes to the local environment	Asking relevant questions and us different types of scientific enqui to answer them	
	Record on an investigation in the context of switches	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Make a musical instrument to play different sounds	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Identify and describe the different stages of the water cycle	Using straightforward scientific evidence to answer questions or to support their findings.	Who is Marie Curie? Life story and contributions to science Nobel prize Radioactivity	e Research, present findings	Construct and interpret food chains	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Describe environmental dangers to endangered species	Reporting on findings from enqui including oral and written explanations, displays or presentations of results and conclusions	
	Earth and Space		Earth and Space		Material Properties/States of Matter - Dissolving		Material Properties/States of Matter - Dissolving		Animals including Humans/Living things and their Habitats		Forces		
	Knowle	dge	Skills		Kno	owledge	S	kills	Knowledge	Skills	Knowledge	Skills	
	Recall basic facts about the Earth, Moon and Sun.         Understand how the planets in our Solar System are organised.         Understand key facts about our Solar System.         Record data and results using scientific diagrams, labels and graphs.         Understand the geocentric and heliocentric models of our solar system.         Understand how the model of the solar system has changed over time.         Describe the movement of the Moon relative to the Earth.		Identifying scientific evidence that has been used to support or refute ideas or arguments.		Identify the properties of a range of materials.		Identifying scientific evidence that has been used to support or refute ideas or arguments.		Sequence the life cycle of a plant and to understand the parts of a flower	Label, diagram	Understand basic facts about forces.	Identifying scientific evidence that been used to support or refute in or arguments.	
			Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in onal and written forms such as displays and other presentations		Investigate different materials and explaining their uses.		Using test results to make predictions to set up further comparative and fair tests		Understand how asexual reproduction occurs in plants	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Explore the effects of gravity.	Recording data and results o increasing complexity using scier diagrams and labels, classificat keys, tables, scatter graphs, bar line graphs	
			Identifying scientific evidence that has been used to support or refute ideas or arguments.		Developing our investigation skills.		Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary		Understand that seeds need to be dispersed so as not to compete with the parent plant	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Use test results to make predictions to set up further comparative and fair tests	Using test results to make predic to set up further comparative an tests	
			Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs		Investigate properties of air and foam.		Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate		Looking at the factors which affect germination	Using test results to make predictions to set up further comparative and fair tests	Observe a variety of forces that slow things down.	Planning different types of scien enquiries to answer question including recognising and contro variables where necessary	
			Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in onal and written forms such as displays and other presentations		Explore making and separating mixtures.		Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs		Describe the difference in the life cycles of different animals	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Understand water resistance.	Using test results to make predic to set up further comparative an tests	
			Identifying scientific evidence that has been used to support or refute ideas or arguments.		Describe how materials dissolve in liquid to form a solution.		Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary		Understand the life cycle of birds and insects	Identifying scientific evidence that has been used to support or refute ideas or arguments.	5 Explain how levers, pulleys, springs and gears transfer force and motion.	Reporting and presenting findi from enquiries, including conclus causal relationships and explana of and degree of trust in result oral and written forms such a displays and other presentatic	
			Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations		Explore how mixtures can be separated through filtering.		Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations		Describe changes as humans develop to old age	Identifying scientific evidence that has been used to support or refute ideas or arguments.	5		
	Understand the relationship between the Earth, the Sun and the Moon.		Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs						Understand different gestation periods	Identifying scientific evidence that has been used to support or refute ideas or arguments.	5		
	Understand different time-zones.		Planning different types of scient including recognising and contr	ific enquiries to answer questions, olling variables where necessary					Identifying ways in which we change as we get older	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate			
									Understand puberty	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations			
									Describe the changes as humans develop to old age	Identifying scientific evidence that has been used to support or refute ideas or arguments.	5		

Year	Autumn 1 Evolution and Inheritance		Autumn 2 Living things and their Habitats		Spring 1 Animal including humans		Spring 2 Light		Summer 1 Electricity		Summer 2 Notable Scientists	
	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills	Knowledge	Skills
	Explain the scientific concept of inheritance	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Give reasons for classifying animals based on their similarities and differences	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Identify the name and the parts of the human circulatory system	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Explain that light travels in straight lines from light sources to our eyes and from light sources to objects then to our eyes	Identifying scientific evidence that has been used to support or refute ideas or arguments.	What is static electricity? Describe what static charge is Describe how to create a build up of static charge How a build up of charge leads to sparks through the air	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	How do scientific ideas change? How knowledge build over time - using sound and the invention of the iphone as an example.	Identifying scientific evidence that has been used to support or refute ideas or arguments.
	Demonstrate understanding of adaptation	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Describe how things are classified into groups (Linnaean System)	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Describe the functions of the main parts of the cirulatory system	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Understand that mirrors reflect light and how they can help us see objects	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	What are the different components in an electrical circuit? Describe the parts of an electrical circuit Explain how electricity in a circuit is different to static electricity State the conditions for electricity flow in a circuit	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	How did our understanding and use of electricity develop? Contributions of Lewis Howard Latimer, Michael Faraday and Mildred Dresselhaus.	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
6	Identify the key ideas of the theory of evolution (Darwin, Wallace)	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Identify the characteristics of different types of animals	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Explain how water and nutrients are transported within the body	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Investigate how refration changes the direction in which light travels	Using test results to make predictions to set up further comparative and fair tests	What are circuit diagrams? Explain what a circuit diagram is Identify the component from the circuit symbols provided Can build a basic circuit from the circuit diagram provided	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	How has human use of materials changed over time? Raw vs synthetic materials Debate: have humans changed materials or have materials changed humans?	Identifying scientific evidence that has been used to support or refute ideas or arguments.
	Identify evidence for evolution from fossil records	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Classify a creature based on its characteristics	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Describe how diet and exercise impact on human bodies.	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Invesitgate how a prism changes a ray of light to show the spectrum	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Observe and explain the effects of differing volts in a circuit by observing and explaining the effect of different volts in a circuit	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	How has our understanding of the human body changed over time? Human anatomy timeline How increased knowledge has led to medical advances Charles Drew and blood banks	Identifying scientific evidence that has been used to support or refute ideas or arguments.
	Understand how human beings have evolved	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Describe and investigate helpful and harmful microorganisms	Using test results to make predictions to set up further comparative and fair tests	Plan a scientific enquiry - link between exercise and heart rate	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Investigate how light enables us to see colours	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Part 1: Plan an investigation, understand variations in how components function; Part 2: Conduct an investigation, record data and	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	How has the discovery of DNA changed science? What is DNA? Story of the discovery of DNA Scientific developments as a result of the discovery of DNA	Identifying scientific evidence that has been used to support or refute ideas or arguments.
	Explain how adaptations can result in both advantages and disadvantages	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Identify the characteristics of different types of microorganisms	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Record, report and present results appropriately	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	Explain why shadows have the same shape as the object that casts them - shadow puppets based on the story of issac Newton	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	report findings; Part 3: Investigate results further by using test results to make predicitions to set up further enquires	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	How have our ideas about the universe changed over time? Geocentric model, Heliocentric model, Elliptical orbits	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
	Explain how human intervention affects evolution	Identifying scientific evidence that has been used to support or refute ideas or arguments.	Classify and explain this classification of organisms found in my local habitat	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Explain the impact of drugs and alcohol on the body and descrieb how scientific evidence highlighted the dangers of smoking	Identifying scientific evidence that has been used to support or refute ideas or arguments.				Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary		f