Areas	EYFS	Year1	Year 2	KS1 National Curriculum	Year 3	Year 4	LKS2 National Curriculum	Year 5	Year 6	UKS2 National Curriculum
Working Scientifically	I can make	I can observe closely, using simple equipment	I can observe closely.	Asking simple questions and	I can ask questions and answer them by setting up scientific enquiries.	I can ask relevant questions and using different types of scientific enquiries to answer them	Asking relevant questions and using different types of scientific	I know examples of instances where scientific evidence has been used to support or refute ideas or arguments	I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Planning different types of scientific
- practical scientific methods, processes and skills		I can carry out simple comparative and fair tests	I can use simple equipment.	Asking simple questions and recognising that they can be answered in different ways	I can make relevant predictions that will be tested in a scientific enquiry.	I can set up simple practical enquiries, comparative and fair tests	enquiries to answer them	I can report on and present findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms	I can take measurements, using a range of scientific equipment, with increasing accuracy and precision	enquiries to answer questions, including recognising and controlling variables where
	I can record simple simple data	I can carry out simple comparative and fair tests I can identify and classify	I can ask simple questions and recognise that they can be answered in different ways	Observing closely, using simple	I can test fairly, with independent and dependent variables, while all other conditions are kept the same.	I can make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Setting up simple practical enquiries, comparative and fair tests		I can record data and results of increasing complicitly using scientific diagrams and labels, classification keys, tables, and ber and line graphs	necessary
	I can use	I can use observations and ideas to suggest answers to questions	I can perform simple tests, record simple data, and talk about what I have found out and how I found it out.	equipment	I can use a range of equipment to measure accurately, including thermometers, data loggers, rulers and stopwatches.		Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units	I can write about and present brief oral findings from an enquiry, speaking clearly and with confidence and using notes where necessary.	I can use test results to make predictions to set up further comparative and fair tests I can use simple models to describe scientific ideas	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat
		lo I can gather and record data to help answer questions	I can use my observations and ideas to suggest answers to questions	Performing simple tests	I can draw bar charts: how to label a disgram using lines.	I can gather, record, classify and presenting data in a variety of ways to help in answering questions	appropriate, taking accurate measurements using standard units using a range of equipment, including thermometers and data loosers	I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary		accuracy and precision, taking repeat readings when appropriate
	questions		I can identify and classify.	Identifying and classifying		I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	I can use test results to make predictions to set up further comparative and fair tests	I can report and present findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations	Recording data and results of increasing
			I can answer simple questions	Using their observations and ideas to suggest answers to questions		I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	Recording findings using simple scientific language, drawings,	I can record data and results of increasing complexity using scientific diagrams including line graphs	I can identify scientific evidence that has been used to support or refute ideas or arguments.	complexity using scientific diagrams and labels, classification keys, tables, scatter
			I can pather and record date	Gathering and recording data to help in		I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	labelled diagrams, keys, bar charts, and tables	I can take measurements, using a range of scientific equipment, with increasing accuracy and precision	I can identify scientific evidence that has been used to support or return ideas or arguments.	graphs, bar and line graphs
			I can gather and record data	Gathering and recording data to help in answering questions		I can identify differences, similarities or changes related to simple scientific ideas and processes	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and			Using test results to make predictions to set up further comparative and fair tests
						I can use straightforward scientific evidence to answer questions or to support their findings.	explanations, displays or presentations of results and conclusions			
							Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions			Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written
										relationships and explanations of and a degree of trust in results, in oral and written
							Identifying differences, similarities or changes related to simple scientific ideas and processes			forms such as displays and other presentations
							Using straightforward acientific evidence to answer questions or			Identifying scientific evidence that has been
							to support their findings.			used to support or refute ideas or arguments
States of matter	I can understand how states of fruit	it.				I can discribe the three states of matter-sold, figuid and piss. I can compare and group materials oppositive, according to whether they are solids, liquids or gases. I know that things are make of particles which are organized differently in different states. I know that things are make of particles which are organized differently in different states. I can observe that some materials change state when they are heated or cooked, and measure or research the temperature at which		I know that a reversible change is one that can be reversed and that examples of this are mixing, dissolving and changes of state where no chemical reaction takes place.		
	can change when blended and	n en				I know that things are made of particles which are organized differently in different states. I can observe that some materials chance state when they are heated or cooled, and measure or research the temperature at which	h	I know that an irreversible change is one that cannot be reversed and that examples of this often involve a chemical change where a new		
	frozen					this happens in degrees Cataus (*C). Linear that when called true left families this is called motion and that the amount access is called families.		material is made, often a gas (e.g. burning, boiling an egg, the reaction of bicarbonate of soda and acid).		
						know that when figuids turn into gasas, this is called evaporation and that the revertie process is called condensation. I know that the misting point of its of and that the beginning point of water is 100C. I know that the misting point of its of and that the beginning point of water is 100C. I can identify the part played by expertation and condensation in the water cycle and associate the rate of evaporation with				
						I know that the melting point of ice is OC and that the boling point of water is 100C. I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with				
						temperature. I know that water condenses in clouds and falls to earth as rain, snow or hall in a process called precipitation.				
						I know that the water cycle is a continuous process.				
Plants		I can explain the difference between deciduous and evergreen trees. I can name and identify a variety of common deciduous and evergreen plants	I know that plants can grow from bulb or seed I can explain the life cycle of a plant starting from bulb or seed > germinate > grow into seedling > grow into mature plants and		I can investigate the way in which water is transported within plants I can explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how					
	I can identify and name vegetables	I know that garden plants are grown by someone for a purpose and wild plants grow randomly from seeds in the ground. I know that garden plants are grown by someone for a purpose and wild plants grow randomly from seeds in the ground.	can explain how they develop over time I know that plants are fiving things that grow, move and consume energy		they vary from plant to plant I can identify and describe the functions of different parts of flowering plants; roots, stem/tyre/v leaves and flowers					
	I can name	I know that many plants are seasonal.	I know that plants need water, light, suitable temperature, air, time to grow.		they very from plant to plant? I can identify and describe the functions of different parts of flowering plants: roots, stem/trurk, leaves and flowers I can investigate the way in which water is transported within plants I can investigate the way in which water is transported within plants I can expice the part that flowers legy in the life cycle of flowering plants, including pollination, seed formation and seed					
	plant	plants flower	I know that plants need water, light, suitable temperature, sir, time to grow. I know that seeds don't need light to grow but a green shoot and leaves will need sunlight for healthy growth.		dispersal.					
	plant needs to grow									
	grow									
Materials & Rocks		I can identify the material of an object: wood, metal, plastic, rock I can group and sort materials based on their properties	I know that a property is something about the material that we can measure, see or feel		I can describe in simple terms how fossits are formed when things that have lived are trapped within rock			I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency,		
		I can group and sort materials based on their properties I can group and sort objects based on their materials I can stentify of the properties of different materials; shiny, stretchy, rough.	I know that applying forces to objects can change their shape, using stretch, bend, twist and squash to describe the change I can describe the properties different materials		I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties I recognise that soils are made from rocks and organic matter.			I can compare and group together everystay materials on the basis of their properties, including their hardness, solicibity, triansparency, conductivity (described and theman), and responses to megnats. I can give reasons, based on evidence from comparative and fair tests, for the perticular uses of everyday materials including metals, wood and desire.		
		I can understand that materials can be formed in different ways and have different properties a militarian	I can choose appropriate materials to build something					I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.		
		can be hard or flexible I know that objects can be made from a mixture of different materials						I understand and can describe solvents and solutes and the process of dissolving. I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and		
		I can test the property of a material e.g. absorbency								
								I can explain that some changes (chemical changes) result in the new formation of new materials, and that this kind of change is not usuall reversible, including changes associated with burning and the action of acid on bicarbonate soda.	y .	
Animals including humans	I can talk about	I can identify ways in which animals vary in structure e.g. wing, legs, ears	I can explain that animals (including humans) need to furfill three basic needs to survive food, water and air and animals move in order to survive. I can explain what a file cycle is and understand that some animals give birth to their offspring and some animals lay eggs. I can explain that some animal young look like their parents (e.g. humans, lones) and some donor lot g., butterfiles, frogs)		I can identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make the own food	I can describe the simple functions of the basic parts of the digestive system in humans. I can identify the different types of leath in humans and their simple functions I know that a human has three lyses of leath—incisor, calmiss and modellar—and that these each perform different functions.		I can describe the changes as humans develop to old age. I can draw a timeline to indicate the stages of growth in humans and should learn about the changes experienced in puberty.	I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood I recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function	
	me using my five	us identify them	I can explain what a life cycle is and understand that some animals give birth to their offspring and some animals lay eggs.		I know they get nutrition from what they eat	I know that a human has three types of teeth – incisors, canines and motars – and that these each perform different functions.		I can draw a timeline to indicate the stages of growth in numers and should learn about the changes experienced in publicly.	I can describe the ways in which nutrients and water are transported within animals, including humans.	
	senses	I understand that some animals eat plants, some eat meat (other animals) and some eat plants and meat (other animals)	I can explain that some animal young look like their parents (e.g. humans, lons) and some do not je.g. butterflies, frogs) I can identify stages of a life cycle for a variety on animals (including humans).		I know that getting the right amount of each food group is called a beanced diet. I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.					
	I know the life cycle of a human	(other animals) I can in arms and identify a range of animals in each group e.g. birds, fish, mammal, reptiles I can identify a human's five senses and know which parts of the body are linked with them	I can explain what a life cycle is and understand that some arimals give both to their driving and some animals say eggs- can explain the same animal years (but the thirp pearent is, is, harmers, form) and otherwise one both of the published is present to the published of the published in the published of the p		I know that getting the right amount of each food group is called a balanced dist. Lack identify this human and some other aimsits have skeldens and mackins for support, protection and movement. I know that some animals (such as lineacts) have an exostaination — a solid covering on the outside of their body. I know that skeldens provide support for mucekes and protect the body.					
	Lose esees the ke	I can experie copers using my serious								
	stages in the life	I can identify the key parts of the human body and understand that these parts are common between	Can identify the Debic Cod operation index about many the debic food groups: fluid and well as the Cod and on the Cod and and the Cod and and a control of the Cod and a cod a cod and a cod a cod a cod a cod a cod and a cod							
	cycle of a specific animal e.g. egg >	I can identify the key parts of the human body and understand that these parts are common between traumans but may very human to the main I can label parts of the human body I can label key parts of the human eye	I can know that food, hygiene and exercise is part of living a healthy life cycle							
Living things and their environment	chick > chicken	I can label key parts of the human eye Seasonal Changes:	I can classify all things by living, dead and never lived.			I know that animals can be grouped in a variety of ways including their physical characteristics (e.g. vertebrates and invertebrates) and		I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	I know that there are three types of micro-organism: viruses, fungi and bacteria	
Living timiga and time time time.	four seasons I can identify	I can name the four seasons	I can name living things (plants (including seeds) and animals)			behavior (e.g. herbivores, carnivores and omnivores).		I can describe the life process of reproduction in some animals.	I know that germs are disease-causing bacteria.	
	seasonal changes	I can name the four seasons: I can understand that weather changes with the seasons and describe features of the the weather in s each season.	I can name living things (plants (including seeds) and animals) I can name dead things (self fallen from a tive, an object made out of wood, plants that are no longer growing) I can name objects that have never level (nock, metal plastic)			Can explore land uses classification skep to being one, not include your dames a valent of through those per their could and wold ennourament focus that favoring through any end-celled from languages, and explored the personal			I snow that germs are disease-causing bacteris. I snow that a mixtempod is an invested and the hard, external seasons and joined limbs. I snow that in antirepod is an invested with a hard, external seasons and joined limbs. I snow that in antichard (e.g. spicer) is a type of arthropod with eight begin and no antennae or wings. I show that an antichard (e.g. spicer) is a type of arthropod with eight begin and no antennae or wings.	
	in weather	I know that the longest day is in the the middle of the summer (16 hours) and the shortest day is in the		tat		I can construct and interpret a variety of food chains, identifying producers, predators and prey. I know how to create a classification key to sort plants found in our local area.			I know that an arachnid (e.g. spider) is a type of arthropod with eight legs and no antennae or wings. I know that a crustacean is a type of arthropod with two pairs of antennae (e.g. woodlouse).	
		Changes in weather might cause other changes e.g. number of minibeasts found outside, seed or plant	I can name an animal in a habitat and describe how they are suited to their environment, e.g.			I know that changes to the environment can make it more difficult for animals to survive and reproduce; in extreme cases this leads to extinction, where an entire species dies.			I know that a crustacean is a type of arthropod with two pairs of amennae (e.g. woodlouse). I know that a myrispod is an arthropod with a flat and long or cylindrical body and many legs (e.g. centipade). I know that it is replaced in an arthropod with a flat and long or cylindrical body and many legs (e.g. centipade).	
		winter (8 hours) Changes in weather might cause other changes e.g. number of minibeasts found outside, seed or plant growth, clothes people wear	I know that microhabitats have different conditions (light or dark, damp or dry)			I know that human activity – such as climate change caused by pollution - can change the environment for many living things, endangering their existence.			I know about the significance of the work of scientists such as Cart Limnaux, a pioneer of classification. I know that, in the Limnauan classification system, living things are referred to by their Latin names. I know that, in the Limnauan classification system, living things are referred to by their Latin names. Through direct observations, I can classify animals into commonly bound inventebrates (such as insects, spiders, snails, worms) and vertebrates	
			I know that animals and plants, within a microhabitat, depend on one another			I know that the polar bear is a famous example of climate change endangering the existence of a species.			(fish, amphibians, reptiles, birds and mammals).	•
			I know that animals and plants, within a microhabitat, depend on one another. I can discuss food chainer of scene animals and understand this is how animals obtain food in order to live. I know that a food chain, plants are called 'producers' and are at the start of the food chain. Producers get their energy from the							
			sun. I can label the consumers and producers in a food chain. I show the meaning of harbivore, omnivore and carnivore.							
			I know the meaning of herbivore, omnivore and carnivore.							
innersance and evolution									I know that fiving things change over time and that this gradual change is called evolution. I know that fossis provide information about fiving things that inhabited the Earth millions of years ago.	
									I know that natural selection is the cause of this change. I recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	
									Innove that Essals provides information about siving things that inhabited the Earth millions of years ago. Involve that inhalts electrical in the cases of thick change. I recognise that living things produce offspring of this wans lost, but normally offspring very and are not identical to their parents. I recognise that living things produce offspring of this wans lost, but normally offspring very and are not identical to their parents. Involve that Chines Champin possible this levery of evolution in your sharest assection.	
F								Unanabarda Anabarda	, , , , , , , , , , , , , , , , , , , ,	
Earth and space								I know that the Sun is a star. I know that a planet is defined as a spherical celestial body that orbits a star. I know that there are eight major planets in our solar system and they cribit the Sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Except Sun		
								T can describe the movement of the Moon relative to the Earth. I know that as the Moon critis the Earth different parts of it are it up by the Sun I can use this idea of the Earth ortation to explain day and right and the apparent movement of the sun across the sky.		
								I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.		
Energy - Light, sound and electricity					Light: know that light is a form of energy.	Electricity: I know that electrical energy is one of many forms of energy.			Light: I know that translucent objects allow some light to pass through, but some of the light changes direction as it wasses through the object.	
					I know that light is a form of energy. I know that we need light to see things and that darkness is the absence of light. I know that light is reflected from surfaces	Now that electrical energy is one of many forms of energy. How that electrical energy is one of many forms of energy. How that court many court electricity is the first of chapsed particless, and electricals makes with being good conductors. How copies some common conclusions and insulation, and electricals makes with being good conductors. How how to conclusion a simple control range components.			Exhow that translucent objects allow some light to pass through, but some of the light changes direction as it passes through the object. I know that when light passes from one medium to another (e.g., from air to water), it changes direction; this is called refraction. I recomise that first deceases to travel in straints fires.	
					I know that the Sun is a light source	I know that electrical current can flow if there is a complete circuit. I know that electrical current can flow if there is a complete circuit.			I can 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	
					I know that the Sun is a light source frecognise that sight from the sun can be dangerous and that there are ways to protect their eyes, such as sunglasses. I recognise that shadows are formed when the light from a light source is blocked by an opaque object I can find patterns in the ways that he size of shadows change.	A MADE TO A CAMBRIDGE OF STREET LINES COMPONENTS.			Intercription that again adjoint process in contract in a single frame that the contract to our eyes or from light sources to objects and then to our eyes I can use the light that light threads in straight fines to require that objects are sen because they give out or reflect light into the eye I can use the lide that light threads in straight fines to explain why shadows have the same shape as the objects that cast them I know that white fight compress at the colours of light;	
					I can find patterns in the way that the size of shadows change	Sound: I can identify how sounds are made, associating some of them with something vibrating.			I know that white light comprises all the colours of light.	
						I can explain how sound travels.			Electricity: I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit	
									I can essociate the brightness of a lamp or the volume of a buzzer with the number and voltage of calls used in the circuit. I can compare and give reasons for variations in how components function, including the brightness of bubs, the loudness of buzzers and the on/off position of switches.	
									on/off position of switches I can use recognised symbols when representing a simple circuit in a diagram	
Forces and magnets	I understand that				I can compare how things move on different surfaces			I can describe gravity, air resistance, water resistance and friction. I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling	, and a second a seco	
	objects can float				I know that a force can be thought of as a push or a pull. I notice that some forces need contact between two objects, but magnetic forces can act at a distance.					
					I notice that some forces need contact between two objects, but magnetic forces can act at a distance I can observe how magnetis attract or repel each other and attract some materials and not others I know that magnets have two poles			ospect. I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces. I can draw a force diagram with arrows representing the different forces action on an object. I know that pers, levers and pulleys are simple machines that are used to allow a smaller force to have a greater effect.		
								I know that gears, levers and pulleys are simple machines that are used to allow a smaller force to have a greater effect.		
					Lain predict whether two magnets will attract or repel each offer other, depending on which poles are facing I know that like poles repel each other is and that opposite poles affected in the poles repel each other is shown that look poles are facing I know that look poles are paged each other is shown that some materials are magnetic while other materials are non-magnetic.					
					I know that some materials are magnetic while other materials are non-magnetic					