

SCIENCE 2021-22

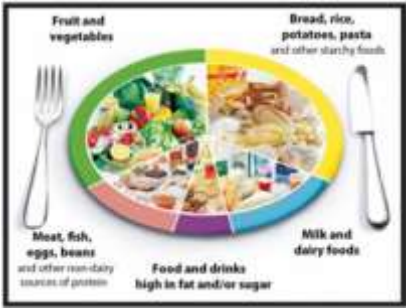
KEY VOCABULARY




	Autumn 2021	Spring 2021	Summer 2022																																	
B 2 Y1/2	Plants Y1	Materials Y1 (Y2 everyday uses)	Human Body Y1																																	
	leaf			These are flat, thin and usually green.																																
	flower			The part of a plant that is often brightly coloured.																																
	petal			Thin, brightly coloured or white part of the flower.																																
	fruit			Fleshy part of a plant that contains seeds or a stone.																																
	root			The part of the plant that grows under the ground.																																
	seed			Small part of a flowering plant that grows into a new plant.																																
	trunk			Large main stem of a tree.																																
	branch			Part of a tree that grows out from the trunk.																																
	stem			The upright main stalk of a plant.																																
	bark			The outer covering of a tree trunk.																																
	Animals, including humans (y1)			<table border="1"> <tr> <td>transparent</td> <td>Completely see-through</td> </tr> <tr> <td>translucent</td> <td>Let some light through but not completely see-through.</td> </tr> <tr> <td>opaque</td> <td>Not able to be seen through.</td> </tr> <tr> <td>flexible</td> <td>Bends easily without breaking.</td> </tr> <tr> <td>rigid</td> <td>Unable to bend or be forced out of shape.</td> </tr> <tr> <td>reflective</td> <td>Reflects light easily.</td> </tr> <tr> <td>non-reflective</td> <td>Does not reflect light</td> </tr> <tr> <td>absorbent</td> <td>Able to soak up liquid easily.</td> </tr> </table>		transparent	Completely see-through	translucent	Let some light through but not completely see-through.	opaque	Not able to be seen through.	flexible	Bends easily without breaking.	rigid	Unable to bend or be forced out of shape.	reflective	Reflects light easily.	non-reflective	Does not reflect light	absorbent	Able to soak up liquid easily.	<table border="1"> <tr> <td>Season</td> <td>Seasons are periods of similar weather. We have 4 seasons.</td> </tr> <tr> <td>Autumn</td> <td>Autumn takes place in: <ul style="list-style-type: none"> September October November </td> </tr> <tr> <td>Winter</td> <td>Winter takes place in: <ul style="list-style-type: none"> December January February </td> </tr> <tr> <td>Spring</td> <td>Spring takes place in: <ul style="list-style-type: none"> March April May </td> </tr> <tr> <td>Summer</td> <td>Summer takes place in: <ul style="list-style-type: none"> June July August </td> </tr> <tr> <td>Weather</td> <td>This is how sunny, rainy, windy, snowy etc that it is. It changes with the seasons.</td> </tr> <tr> <td>sunrise</td> <td>The time in the morning when the sun first appears in the sky.</td> </tr> <tr> <td>sunset</td> <td>The time in the evening when the sun disappears</td> </tr> </table>	Season	Seasons are periods of similar weather. We have 4 seasons.	Autumn	Autumn takes place in: <ul style="list-style-type: none"> September October November 	Winter	Winter takes place in: <ul style="list-style-type: none"> December January February 	Spring	Spring takes place in: <ul style="list-style-type: none"> March April May 	Summer	Summer takes place in: <ul style="list-style-type: none"> June July August 	Weather	This is how sunny, rainy, windy, snowy etc that it is. It changes with the seasons.	sunrise	The time in the morning when the sun first appears in the sky.
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describe the features of different animals																																				
head	body																																			
eyes	ears																																			
mouth	teeth																																			
leg	tail																																			
wing	claw																																			
fin	scales																																			
feathers	fur																																			
beak	paws																																			
hooves	hair																																			

				out of sight in the sky.
			Plants Y2	
			seed	Part of a flowering plant that grows into a new plant.
			bulb	A root shaped like an onion that grows into a new plant.
			germinate	When a seed begins to grow its shoots. Seeds need warmth and water to germinate.
			seedling	A young plant that has grown from a seed.
			bud	Growth on a plant that develops into a stem, leaf or shoot.
			flower	The part of a plant which is often brightly coloured and grows at the end of a stem.
			fruit	Fleshy part of a plant that contains seeds or a stone.
			berry	Small, juicy fruit without a stone.
			root	The part of the plant that grows under the ground.

B 3 Y2/3	Plants Y2		Rocks Y3		Forces Y3	
	seed	Part of a flowering plant that grows into a new plant.	rock	A naturally occurring material made of minerals. They can be different sizes: <ul style="list-style-type: none"> • stones • pebbles • boulders 	force	A force is a push or a pull.
	bulb	A root shaped like an onion that grows into a new plant.	fossil	The bones or other remains of living things are sometimes preserved in rocks as fossils.	magnetic force	An invisible force that attracts magnetic metals.
	germinate	When a seed begins to grow its shoots. Seeds need warmth and water to germinate.	soil	Ground up rock mixed with plant and animal remains.	magnet	Magnets attract magnetic materials. Iron, nickel, cobalt and materials that contain these (e.g. stainless steel) are magnetic.
	seedling	A young plant that has grown from a seed.	Light Y3		attract	To pull towards.
	bud	Growth on a plant that develops into a stem, leaf or shoot.	light	We can see objects because our eyes can sense light.	repel	To push away.
	flower	The part of a plant which is often brightly coloured and grows at the end of a stem.	dark	Darkness is the absence of light.	poles	Magnets have two poles, a north pole and a south pole.
	fruit	Fleshy part of a plant that contains seeds or a stone.	light source	Some objects emit their own light and are sources of light. the sun lightbulbs candles	contact force	Many forces need contact to act:
	berry	Small, juicy fruit without a stone.	Trans-	A material that is	non-contact force	Magnetic force does not need contact and can act at

root	The part of the plant that grows under the ground.	parent	completely see through so all the light can pass through.
Y3 Know the function of different parts of flowering plants and trees		Trans-lucent	A material that lets some light through but not all of it.
roots	Anchor a plant in place. The roots also absorb water and nutrients from the soil.	opaque	A material that light cannot pass through. You cannot see through it.
stem/trunk	Transports water and nutrients around the plant. It also holds the leaves/flowers up in the air.	shadow	These are formed when an object blocks light.
leaves	They use sunlight and water to produce the plant's food.	reflect	When light bounces off a surface.
Photo-synthesis	The way in which plants make food in their leaves.	mirror	A sheet of glass or metal that reflects light.
pollen	This is a very fine powder that is produced by the male part of the flower.		
pollination	When pollen is transferred to female parts of a flower. This can be done by wind or insects.		
seed formation	Seeds can develop after pollination. They can be found in berries or fruits.		
seed dispersal	Seeds can be dispersed in different ways, for example, wind, animals or water.		
germination	When a seed sprouts a root and shoot.		

Animals, including humans Y2 Name some different sources of food for animals			
			
Know the importance of a nutritious, balanced diet Y3			
nutrition	Food necessary for health and growth.		

nutrients	Useful substances that help animals and plants grow.		
Carbo-hydrates	<p>These are the foods that give us energy. They are found in sugary and starchy foods.</p> 		
proteins	<p>These are important so the body can grow, repair and build muscle.</p> 		
vitamins and minerals	<p>Substances found in foods which keep us healthy. These are found in fruit and vegetables.</p> 		
fibre	This lets food pass quickly through your body. It helps keep your digestive system in good working order.		
skeleton	This supports and protects the body, allowing it to move.		
bones	The hard parts inside your body which form your skeleton.		
muscles	These are attached to bones and help us move.		
joints	The place where 2 bones meet.		

B 4 Y4/5	All living things and their habitats Y4		States of Matter Y4		Electricity Y4	
	classification	Grouping things based on their characteristics so that they can be identified.	change of state	When a material changes from one state to another.	electricity	A form of energy used for lighting, heating, making sound and making machines work.
	classification key	A series of yes/no questions that help identify or classify things.	melting	A solid changing into a liquid.	electrical appliance	A machine or device that runs on electricity.
	environment	The conditions in which a living thing exists. Soil, climate and other living things all count as part of the environment.	freezing	When a liquid becomes cold enough to turn solid, it freezes.	mains	The electricity supplied to households from power stations.
	habitat	The place where an animal or plant	melting point	The temperature at which a solid becomes a liquid.	electrical circuit	This consists of a cell or battery connected to a component using wires. It needs to be a complete circuit to work.
	migrate	The long-distance movement of animals, usually due to a change in the seasons.	boiling point	The temperature at which a liquid turns into a gas.	cell and battery	A cell is a single unit and collection of cells.
	hibernate	An animal or plant that spends the winter in a dormant state.	evaporation	When liquid changes into a gas.	electrical component	A part that combines with others to form a circuit. E.g. bulb, motor , buzzer
	vertebrates	Animals that have a backbone. Fish, amphibians, reptiles, birds and mammals.	condensation	The process when a gas changes into a liquid, caused by cooling.	switch	Can be added to a circuit to turn a component on or off. It allows the electricity to flow or it stops it.
	invertebrates	Animals that do not have a back bone. Examples are snails, worms, spiders and insects	water cycle	The never-ending process of water moving from the oceans, up into the atmosphere, and back to the Earth and oceans.	conductor	Material that allows electricity to pass through.
			temperature	The measure of how hot or cold something is.	insulator	Material that does not allow electricity to pass through it.
Earth and Space Y5		Properties and changes in material Y5		Sound Y4		
Earth	The planet we live on. It is the third planet from the Sun.	thermal insulator	Does not allow heat to pass through it easily.	sound	Something you can hear or that can be heard. We hear sound with our ears.	
Sun	The Sun is the star at the centre of our solar system It is not safe to look directly at the Sun, even when wearing dark glasses.	thermal conductor	Allows heat to pass through it easily.	sound source	A source is producing sound when some part of it is vibrating.	
Moon	The moon is the only natural satellite of the Earth.	electrical insulator	Does not allow electricity to pass through it.	vibrations	Sounds are made when something vibrates. This means it moves quickly backwards and forwards.	
planets	Large round objects, made of rock or gas, that move around the sun.	electrical conductor	Allows electricity to pass through it.	pitch	How high or low a sound is.	
solar system	The sun and all the planets that orbit around it.	dissolve	A solid that completely mixes in with a liquid and cannot be seen.	volume	How loud or quiet a sound is.	
star	A huge ball of glowing gas in space.	solution	A mixture of a liquid with a dissolved solid or gas.	sound insulation	A material which blocks sound effectively.	
		soluble	Solids and gases that dissolve in liquids.			
		insoluble	Solids that do not dissolve in a liquid.			
		sieve	Separates solids of different sizes.			
		filter	Separates an insoluble			

	rotate	When an object rotates it turns (spins) on its axis.		solid that is mixed in a liquid.		
	orbit	The curved path that an object follows going around a star or a planet.	evaporation	Separates a soluble solid and a liquid.		
			reversible change	Changes that can be switched back and are not permanent. E.g. dissolving, melting, freezing		
			non-reversible change	Changes that can not be reversed back to their original state. E.g. burning, rusting		

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B 5 Y5/6	Animals including humans Y6		Living things and their habitats Y6		Forces Y5	
	heart	The heart pumps blood around your body.	life cycle	This shows how things are born, how they grow and reproduce.	force	A force is a push or a pull. Forces make objects start moving, stop moving, speed up, slow down or change direction.
	pulse	Each time the heart beats it can be felt as a pulse in the arteries. Typically, in the wrist and neck.	reproduction	As part of their life cycle plants and animals reproduce. There is sexual and asexual reproduction.	gravity	A force which pulls things down towards the Earth.
	blood	The red liquid pumped around the body by the heart. It transports oxygen, nutrients and water to all the parts of the body.	sexual reproduction	Both the male and female are needed. Most animals reproduce sexually.	Force meter	Piece of equipment used to measure the size of a force.
	blood vessels	The narrow tubes which our blood flows through including the arteries, veins and capillaries.	asexual reproduction	Only one parent is needed. This occurs mostly in plants and bacteria.	Newton (N)	The unit for measuring force.
	lungs	Two organs situated in the ribcage that fill with air when you breathe in. They remove carbon dioxide from blood and add oxygen.	fertilise	In animals: When the male sperm reaches the female egg. In plants: When the male pollen reaches the female ovule.	air resistance	The force that slows down objects that move through air.
	Circulatory system	This circulates blood through the body. It consists of the heart, blood and blood vessels.	Meta-morphosis	A major change from one form to another in the life cycle of some animals when they change from young to an adult.	water resistance	A force that slows down objects moving through water.
	diet	The sort of food animals or humans regularly eat.	runner	A long stem of a plant that grows along the ground in order to put down roots in a new place.	friction	When one surface moves against another, the rubbing force that tries to stop them is called friction. It gives us grip.
	exercise	Activity that requires physical effort, carried out to sustain or improve health and fitness.	bulb	A round root of some plants from which the plant grows.	mechanisms	A device that allows a small force to be increased to a larger force.
	drugs	A medicine or other substance that has an effect in a person's body.	cutting	A piece, such as a roof, stem or leaf cut from a plant	simple machines	Levers, pulleys and gears are all types of simple machines.
	lifestyle			Sound Y4		
				sound	Something you can hear or that can be heard. We hear sound with our ears.	
				sound source	A source is producing sound when some part of it is vibrating.	
				vibrations	Sounds are made when something vibrates. This means it moves quickly backwards and forwards.	

			and used to grow another plant of the same type.	pitch	How high or low a sound is.	
		tuber	A swollen underground stem or root of a plant from which new plants can grow.	volume	How loud or quiet a sound is.	
				sound insulation	A material which blocks sound effectively.	
Evolution and adaptation Y6						
		evolution	The way in which plants and animals have changed over millions of years.			
		offspring	A person's child/ children or an animal's young.			
		inherited	The way a trait or characteristic is passed to offspring from parents.			
		Characteristics	A distinguishing trait, feature or quality.			
		variation	A change or small difference.			
		adapted	Animals and plants are adapted to their environment. Their bodies are suited to the way they live.			
		environment	The conditions in which a living thing exists.			
		species	A group of closely related organisms that are very similar to each other. We are the human species.			
		fossil	The naturally preserved remains or traces of animals or plants that lived long ago.			
Living things and their habitats Y6						
		vertebrate	Animals that have a backbone. They can be divided into 5 groups: fish, amphibians, reptiles, birds and mammals.			
		fish	- cold-blooded - scales covering its body - has fins - lives in water, lays eggs in water - breathes through gills			
		amphibian	- cold-blooded			

			<ul style="list-style-type: none"> - start as eggs in water and breathe through gills - later develop lungs and live on land and in water - lays eggs in water - damp skin/body 	
		reptile	<ul style="list-style-type: none"> - cold-blooded - breathes with lungs - dry, scaly skin - lay soft-shelled eggs on land 	
		bird	<ul style="list-style-type: none"> - warm-blooded - breathes with lungs - lays eggs with hard shells - covered with feathers - have wings but not all can fly 	
		mammal	<ul style="list-style-type: none"> - warm-blooded - have fur or hairy skin - give birth to live young - feed their young milk 	
		Invertebrate	Animals that do not have a backbone. Can be divided into several groups including insects, spiders, snails and worms.	
		plants	Can make their own food. They can be divided broadly into two main groups: flowering plants and non-flowering plants.	