Progression of Knowledge in Science

National Curriculum Programmes of study			Pupils should be taught to: • identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • Identify and describe the basic structure of a variety of common flowering plants, including trees. • observe and describe how seeds and bulbs grow into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy		Pupils should be taught to: • identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • 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 • 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, seed formation and seed dispersal.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plants		**Pupils should know how to:** • Observe the basic needs to care for plants • Talk about and observe plants as they grow • Identify some common varieties of plants. • Know the difference between a non-	**Pupils should know how to:** • Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • Identify and describe the basic structure of a variety of common flowering plants, including trees, i.e. roots, trunk, stem, leaves, petal. **<u>Investigations</u>** **Are all leaves the same?**	**Pupils should know how to:** • Observe and describe how seeds and bulbs grow into mature plants • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy • Identify things that are living, dead	**Pupils should know how to:** • Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • 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		**Pupils should know how to:** • To know that plants produce flowers which have male and female organs. • To know that seeds are formed when pollen from the male organ fertilises the ovum (female). • To know that insects pollinate some flowers and how this is done • To know that seeds can be	

		flowering and flowering plant. .		and never lived. **<u>Investigations</u>** **Can seeds grown anywhere?** **What does grass need to grow?**	• 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, seed formation and seed dispersal **<u>Investigations</u>** **Where does the water go?** **Do plants have legs?** **Are mushrooms deadly?**		dispersed in a variety of ways. • To know the different stages of the lifecycle of a plant • To know and explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences **<u>Investigations</u>** **What affects germination?**	
		Key Vocabulary Plant, seed, bulb, water, soil, flowering plant	**Key Vocabulary** Deciduous; evergreen; trunk; leaves; branches; roots; stem; petals; flower	**Key Vocabulary** Leaf; stem; roots; petals; light; soil; water; seed; bulb; temperature; healthy	**Key Vocabulary** Germination; pollination; dispersal; life cycle; attract; fertilisation, reproduction		**Key Vocabulary** Pollination; pollinator; fertilisation; reproduction; germination; healthy;	

National Curriculum Programmes of study		Pupils should be taught to: • identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • identify and name a variety of common animals that are carnivores, herbivores and omnivores • describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) • identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. • notice that animals, including humans, have offspring which grow into adults • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.		Pupils should be taught to: • identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • identify that humans and some other animals have skeletons and muscles for support, protection and movement. • describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey • describe the changes as humans develop to old age. • identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • describe the ways in which nutrients and water are transported within animals, including humans.				
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals including Humans		**Pupils should know how to:** • Sort animals into categories – sea creatures , farm animals, wild animals • Describe the different environments animals would be found • Name Minibeasts and	**Pupils should know how to:** • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • Identify and name a variety of common animals that are carnivores, herbivores and omnivores • Describe and compare the structure of a variety of common animals (fish,	**Pupils should know how to:** • Notice that animals, including humans, have offspring which grow into adults • Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	**Pupils should know how to:** • Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • Identify that humans and some other animals have skeletons and muscles for support, protection and movement	**Pupils should know how to:** • Describe the simple functions of the basic parts of the digestive system in humans • Identify the different types of teeth in humans and their simple functions • Construct and interpret a variety of	**Pupils should know how to:** • Describe the the changes as humans develop to old age. **<u>Investigations</u>** **Do we slow down as we get older?**	**Pupils should know how to:** • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • Recognise the impact of diet, exercise, drugs and lifestyle on the way

		recognise their natural habitats	amphibians, reptiles, birds and mammals, including pets) • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense • Sort living things and non-living things **<u>Investigations</u>** **What is camouflage for?**	• Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene **<u>Investigations</u>** **How do germs spread?** **Why should we exercise?**	**<u>Investigations</u>** **What are our joints for?** **Which is the juiciest fruit?** **How clean are your hands?**	food chains, identifying producers, predators and prey. **<u>Investigations</u>** **What is spit for?** **How do different liquids affect teeth?** **How does toothpaste affect teeth?** **How much sugar is in drinks?**		their bodies function • Describe the ways in which nutrients and water are transported within animals, including humans **<u>Investigations</u>** **How does blood flow?** **What can your heart rate tell you?**
		Key Vocabulary Home; habitat; environment, ocean; sea; farm; savannah, Minibeast names	**Key Vocabulary** Amphibian; reptile; bird; mammal; diet; teeth; carnivore; omnivore; herbivore; protection; camouflage; prey; predator; touch; smell; taste; sight; hear; senses; human body	**Key Vocabulary** Lifecycle; exercise; diet; balanced; hygiene; food; offspring; survival	**Key Vocabulary**	**Key Vocabulary** Incisor; molar; pre molar; canine; filling; tooth decay; plaque	**Key Vocabulary**	**Key Vocabulary** Arteries; blood vessels; blood pressure; capillaries; heart; circulation; circulatory system; platelet; plasma; red blood cells; white blood cells; transfusion; vein; pulse

National Curriculum Programmes of study			Pupils should be taught to: • explore and compare the differences between things that are living, dead, and things that have never been alive • identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other • identify and name a variety of plants and animals in their habitats, including microhabitats • describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.		Pupils should be taught to: • recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • recognise that environments can change and that this can sometimes pose dangers to living things. • describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • describe the life process of reproduction in some plants and animals • describe how living things are classified into broad groups according to common • observable characteristics and based on similarities and differences, including micro-organisms,plants and animals • give reasons for classifying plants and animals based on specific characteristics.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Living Things and their habitats		**Pupils should know how to:** • Recognise items found in the sea • Sort & describe different types of shells • Recognise materials that can be recycled • Recognise and talk about the lifecycle of a turtle • Recognise items found in a rock pool		**Pupils should know how to:** • Explore and compare the difference between things that are living, dead, and things that have never been alive • Identify that most living things live in habitats to which they are suited and describe how different habitats provide the		**Pupils should know how to:** • Recognise that living things can be grouped in a variety of ways • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • Recognise that environments can change and that this can	**Pupils should know how to:** Describe how living things are classified into broad groups according to common observable characteristic including micro-organisms Explain that bacteria, viruses and fungi are three different types of microbes. Understand that microbes are found everywhere Understand that some microbes can help keep us healthy.	**Pupils should know how to:** • Describe how the Earth and living things have changed over time • Explain how fossils can be used to find out about the past • Explain how plants and animals are adapted to suit their environment • Describe how living things are classified into broad

				basic needs of different kinds of animals and plants, and how they depend on each other • Identify and name a variety of plants and animals in their habitats, including micro-habitats • Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food **Investigations** **Do insects have a favourite colour?** **Where do worms like to live?**		sometimes pose dangers to living things **Investigations** **How does pollution affect habitat?** **What type of litter attracts animals?**	Understand that some microbes can be put to good use. Learn that infection can spread through sneezing and coughing **Investigations** **How clean are your hands?** **How does yeast work?**	groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristic **Investigations** **Can we slow cooling down?** **How do animals stay warm?**
		Key Vocabulary Sea; ocean; fish; seaweed; rock; shell, Clam; button; conch,		**Key Vocabulary** Life cycle; minibeast; invertebrates; food chain; habitat; micro-habitat;		**Key Vocabulary** Vertebrate; invertebrate; mammal; amphibian; fish; reptile; bird; environment	**Key Vocabulary** micro-organisms; fungi; bacteria; viruses	**Key Vocabulary** Antarctic; Arctic; freeze; habitat; biodiversity; ecosystem; dense; insulate; inhibit

		Recycle; materials; plastic, Turtle; eggs; hatchling; juvenile; adult, crab; shell		prey; predator; source; consumer; energy; survival; diet; hygiene; camouflage; exercise				

National Curriculum Programmes of study					Pupils should be taught to: • recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evolution and Inheritance								**Pupils should know how to:** • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Identify how animals and plants are adapted to

								suit their environment in different ways and that adaptation may lead to evolution **<u>Investigations</u>** **Why are things classified?** **Why is holly prickly?** **Why do birds have different beaks?**
								Key Vocabulary Adaptation; artificial selection; DNA; evolution; extinct; fossil; selective breeding; inheritance; natural selection; species; trait; dominant; recessive; classification; gene; inherit; arch; chromosome; characteristic; classify; genetic; molecule; fingerprint; loop; whorl

National Curriculum Programmes of study			Pupils should be taught to: • observe changes across the four seasons • observe and describe weather associated with the seasons and how day length varies.					
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Seasonal Changes		**Pupils should know how to:** • Name the different seasons • Talk about when the different seasons appear in throughout the year • Talk about how leaves change throughout the different season	**Pupils should know how to:** • Observe changes across the four seasons • Observe and describe weather associated with the seasons and how day length varies **<u>Investigations</u>** **What is the weather like?**					
		Key Vocabulary Seasons; autumn; winter; spring; summer; leaves; crispy; brown; orange; red; blossom	**Key Vocabulary** Autumn; winter; spring; summer; seasons; weather; month; year					

National Curriculum Programmes of study					Pupils should be taught to: • compare how things move on different surfaces • notice that some forces need contact between two objects, but magnetic forces can act at a distance • observe how magnets attract or repel each other and attract some materials and not others • 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 • describe magnets as having two poles • predict whether two magnets will attract or repel each other, depending on which poles are facing. • explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Forces					**Pupils should know how to:** • Compare how things move on different surfaces • Notice that some forces need contact between two objects, but magnetic forces can act at a distance • Observe how magnets attract or repel each other and attract some materials and not others • Compare and group together a variety of everyday materials on the basis on whether they are attracted		**Pupils should know how to:** • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object • Identify the effects of air resistance, water resistance and friction, that act between moving surfaces • Recognise that some mechanisms including levers, pulleys and gears	

					to a magnet, and identify some magnetic materials • Describe magnets as having two poles • Predict whether two magnets will attract or repel each other, depending on which poles are facing **<u>Investigations</u>** **Can you block magnetism?** **How mighty are magnets?**		allow a smaller force to have a greater effect **<u>Investigations</u>** **How do levers help us?** **Why are zip wires so fast?**	
					Key Vocabulary Pole; force; magnetic; magnetism; attract; repel; force; force meter; gravity; natural		**Key Vocabulary** Force; air resistance; water resistance; buoyancy; load; gravity; up thrust; exert	

National Curriculum Programmes of study					Pupils should be taught to: • recognise that they need light in order to see things and that dark is the absence of light • notice that light is reflected from surfaces • recognise that light from the sun can be dangerous and that there are ways to protect their eyes • recognise that shadows are formed when the light from a light source is blocked by an opaque object • find patterns in the way that the size of shadows change. • recognise that light appears to travel in straight lines • use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • 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 • use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Light					**Pupils should know how to:** • Recognise that they need light in order to see things and that the dark is the absence of light • Notice that light is reflected from surfaces • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes • Recognise that shadows are formed when the light from a light source is blocked by a solid object • Find patterns in the way that the size of shadows changes			**Pupils should know how to:** • Recognise that light appears to travel in straight lines • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye • Explain that we see things because light travels from light sources to our eyes or

					<u>Investigations</u> **Why do shadows change?** **Why do cat's eyes glow at night?**			from light sources to objects and then to our eyes • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them **<u>Investigations</u>** **Can we see through it?**
					Key Vocabulary Shadow; source; opaque; transparent; reflector; natural			**Key Vocabulary** Optical; voltage; cladding; transmit; circuit; internal reflection; optical fibres

National Curriculum Programmes of study					Pupils should be taught to: • identify how sounds are made, associating some of them with something vibrating • recognise that vibrations from sounds travel through a medium to the ear • find patterns between the pitch of a sound and features of the object that produced it • find patterns between the volume of a sound and the strength of the vibrations that produced it • recognise that sounds get fainter as the distance from the sound source increases.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Sound						**Pupils should know how to:** • Identify how sounds are made, associating some of them with something vibrating • Recognise that vibrations from sounds travel through a medium to the ear • Find patterns between the pitch of a sound and features of the object that produced it • Find patterns between the volume of a sound and the strength of the vibrations		

						that produced it • Recognise that sounds get fainter as the distance from the sound source increases **<u>Investigations</u>** **How far can sound travel?** **Can we block sound?**		
						Key Vocabulary Vibration; sound waves; waves; pitch; sound proof; volume		

National Curriculum Programmes of study					Pupils should be taught to: • describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Earth and Space							**Pupils should know how to:** • Describe the movement of the Earth and other planets relative to the sun in the solar system • Describe the movement of the moon relative to the Earth • Describe the sun, Earth and moon as approximately spherical bodies • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky **<u>Investigations</u>** **Is the Earth round?** **Why do planets have craters?** **Key Vocabulary**	

							Orbit; elliptical; crater; lunar; phase; satellite; axis; solar system; universe	

National Curriculum Programmes of study					Pupils should be taught to: • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors • associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • use recognised symbols when representing a simple circuit in a diagram.			
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Electricity						**Pupils should know how to:** • Identify common appliances that run on electricity • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • Identify whether or not a lamp will light in a simple series circuit, based on whether or		**Pupils should know how to:** • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

						not the lamp is part of a complete loop with a battery • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • Recognise some common conductors and insulators, and associate metals with being good conductors **Investigations** **What conducts electricity?** **How do plugs work?** **Can you make a circuit from play dough**		• Use recognised symbols when representing a simple circuit in a diagram **Investigations** **Can fruit light a bulb?** **Can you turn a light bulb down?**
						Key Vocabulary Conductor, insulator, current, cell, battery, wire, bulb, motor, buzzer, circuit		**Key Vocabulary** Series circuit, current, cell, battery, wire, bulb, motor, buzzer, circuit, voltage

National Curriculum Programmes of study		Pupils should be taught to: • distinguish between an object and the material from which it is made • identify and name a variety of everyday materials, including wood, plastic, glass, • metal, water, and rock • describe the simple physical properties of a variety of everyday materials • compare and group together a variety of everyday materials on the basis of their simple physical properties • identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.		Pupils should be taught to: • compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • describe in simple terms how fossils are formed when things that have lived are trapped within rock • recognise that soils are made from rocks and organic matter. • compare and group materials together, according to whether they are solids, liquids or gases • observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. • compare and group together everyday materials on the basis of their properties, • including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • demonstrate that dissolving, mixing and changes of state are reversible changes • explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.				
		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Materials		**Pupils should know how to:** • Observe and talk about materials • Talk about materials that are different and similar • Sort materials based on properties • Observe materials	**<u>Everyday Materials</u>** **Pupils should know how to:** • Distinguish between an object and the material from which it is made • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • Describe the simple physical properties of a variety of	**<u>Uses of Everyday Materials</u>** **Pupils should know how to:** • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and	**<u>Rocks</u>** **Pupils should know how to:** • Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • Describe in simple terms how fossils are formed when things that have lived are trapped within rock	**<u>States of Matter</u>** **Pupils should know how to:** • Compare and group materials together, according to whether they are solids, liquids or gases • Observe that some materials change state when they are	**<u>Properties and Changes of Materials</u>** **Pupils should know how to:** • Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency conductivity (electrical and thermal), and	

		that float and sink	everyday materials; • Compare and group together a variety of everyday materials on the basis of their simple physical properties **<u>Investigations</u>** **What can our hands do?** **Why do we have two eyes?** **Which material will make the best curtains?** **Are all metals magnetic?** **Which material will make an umbrella?**	cardboard for particular uses • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching • Identify which materials sink and float and understand buoyancy **<u>Investigations</u>** **Do all balls bounce?** **Which stuff is sticker?** **How do materials change when heated and cooled?** **Which materials don't mix?** **Which materials float?**	• Recognise that soils are made from rocks and organic matter **<u>Investigations</u>** **What is soil?** **What is sand?** **How clean is water?**	heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature **<u>Investigations</u>** **Where does water go?** **Are all liquids runny?**	response to magnets • Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • Demonstrate that dissolving, mixing and changes of state are reversible changes • Explain that some changes result in the formation of new materials, and	

				How can we make objects more buoyant?			that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda **<u>Investigations</u>** **Can you clean water?** **Will it erupt?**	
	Key Vocabulary Melting, heating, hard, soft, bendy, mixing	**Key Vocabulary** Melting, heating, hard, soft, bendy, mixing, float, sink	**Key Vocabulary** Material; opaque; transparent; magnetic; non-magnetic; waterproof; bendy; strong	**Key Vocabulary** Solid; rough; smooth; waterproof; transparent; strong; opaque; rigid; glue; natural; stickier; absorbent; consistency; flexible	**Key Vocabulary** Compression; fossil; metamorphic; sedimentary; humus; topsoil; parent material; bedrock	**Key Vocabulary** Solid; liquid; gas; particles; melting; freezing; heating; cooling; viscosity; water cycle; precipitation; condensation; evaporation; collection	**Key Vocabulary** Dissolve; soluble; solute; insoluble; solution; reversible; irreversible; suspension; state; material	