

Year One Key Vocabulary and End Points			
Seasons and Weather Day and Night	Plants, including trees	Animals Including humans	Everyday materials
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>Dawn, dusk, mild, rotate, soaked, weather</i>	<i>Bud, trunk, branch, bark, seed, wild</i>	<i>Blood, senses, young, feathers, fur, scales</i>	<i>Absorb, rough, smooth, waterproof, metal, plastic</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Month, season, spring, summer, autumn, winter</i>	<i>Nutrients, stem, deciduous, evergreen</i>	<i>Mammal, amphibian, reptile, herbivore, carnivore, omnivore</i>	<i>Materials, properties, flexible, transparent, opaque, physical</i>
End Points	End Points	End Points	End Points
<i>Seasons and weather</i> <i>What are the four seasons?</i> <i>What's the weather like in Autumn, Winter, Spring and Summer?</i> <i>Day to night</i> <i>Why does day become night?</i>	<i>Structure of plants</i> <i>What are the parts of a plant?</i> <i>Wild and common plants</i> <i>What are wild plants and where do you find them?</i> <i>What are garden plants and where do you find them?</i> <i>Trees</i> <i>What makes a tree?</i> <i>What types of tree are there? (Trees that live around my school)</i> <i>What's the difference between trees?</i>	<i>Animals</i> <i>What is an animal?</i> <i>What types of animals are there?</i> <i>What is similar and what is different?</i> <i>Eating</i> <i>What does food tell us about an animal?</i> <i>Senses</i> <i>What makes me an animal? What senses do I have?</i>	<i>Materials</i> <i>What are materials?</i> <i>What are things made of in school?</i> <i>Properties</i> <i>How can I describe materials?</i> <i>Which materials are waterproof and which are not?</i> <i>Which materials are transparent and which are opaque?</i> <i>Use what you know</i> <i>What's the best material for the job? Why?</i>

Year Two Key Vocabulary and End Points			
Living things and their habitats	Animals including humans	Use of everyday materials	Plants
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>Thrive, depend, producer, consume, prey, predator</i>	<i>Healthy, survive, exercise, heart, lungs, muscles</i>	<i>artificial ,brittle, extracted, fabric, manufactured, natural</i>	<i>Wither, dormant, mature, bulb, anchor, sustain</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Oxygen, nutrition, respiration, sensitivity, reproduction, excretion</i>	<i>Hygiene, larva, pupa, vertebrates, invertebrates, metamorphosis</i>	<i>Ceramic, durable inflexible, reflective, rigid, translucent</i>	<i>Germination, perennial, carbon dioxide, glucose, clone</i>
End Points	End Points	End Points	End Points
<i>Characteristics of living things</i> <i>What is alive and what is not?</i> <i>What do all living things have in common?</i> <i>Location of living things</i> <i>Where do plants and animals live?</i> <i>What plants and animals live in our local environment?</i> <i>How living things are connected</i> <i>What are food chains? How are they connected?</i> <i>Why do plants and animals need each other?</i>	<i>Animals and change</i> <i>REMEMBER: what is an animal?</i> <i>How do animals change as they mature?</i> <i>Air, water and food</i> <i>How do we change as we mature?</i> <i>What do all animals need to stay alive?</i> <i>Health and food</i> <i>Keeping healthy: why do we exercise?</i> <i>Keeping healthy: why do we eat different types of food?</i>	<i>Materials</i> <i>What are materials used for? Categorise and compare wood, metal, plastic and glass.</i> <i>What are materials used for? Categorise and compare ceramics, rock, paper and card, and fabric.</i> <i>Changes</i> <i>What happens when we squash, bend, twist or stretch a material?</i> <i>Purpose</i> <i>What's the right material for the job?</i> <i>What's the most absorbent material? Who invented waterproofing?</i>	<i>Growing from a seed</i> <i>How do seeds germinate and what happens?</i> <i>Growing from a bulb</i> <i>What happens when bulbs sprout?</i> <i>Healthy plants</i> <i>What do plants need to thrive and be healthy?</i> <i>What can happen if plants don't get the things they need?</i> <i>What do I notice about plants around the school?</i> <i>How are they healthy?</i> <i>How are they unhealthy?</i> <i>Show what you know</i> <i>How do seeds and bulbs grow? What do plants need to be healthy?</i>

Year Three Key Vocabulary and End Points				
Rocks	Animals including humans	Forces and magnets	Light	Plants
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>Cemented, compacted, decay, prehistoric, soil, transform</i>	<i>Minerals, skeleton, skull, voluntary, involuntary, nerves</i>	<i>Consequence, contact, force, attract, north, south</i>	<i>Absence, cast (shadow), impenetrable, reflect, shadow, source (light)</i>	<i>adapt ,essential ,glucose, transport, variety, vital</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Fossil, igneous, magma, metamorphic, minerals, sedimentary</i>	<i>Biceps, triceps, vertebrae, vitamins, proteins, carbohydrates</i>	<i>Magnet, resistance, friction, repel, pole, magnetic field</i>	<i>Constant, dependent, independent, illuminate, translucent, variable</i>	<i>Transpiration, stoma, pollination, stamen, pistil, photosynthesis</i>
End Points	End Points	End Points	End Points	End Points
<i>Types</i> <i>How are rocks formed?</i> <i>What types of rocks are there?</i> <i>Change</i> <i>Can rocks change?</i> <i>How can we test a rock to see if it is limestone or chalk?</i> <i>Soil</i> <i>Is soil just dirt? What makes soil?</i> <i>Fossils</i> <i>How are fossils formed?</i> <i>Elaborate and remember rocks, soils and fossils.</i>	<i>Food</i> <i>What effect does the food we eat have?</i> <i>Skeleton</i> <i>Where is my skeleton and what does it do?</i> <i>Muscle</i> <i>Where are my muscles and what do they do?</i>	<i>Contact force and friction</i> <i>What are contact forces?</i> <i>How do surfaces affect the motion of an object?</i> <i>How does friction affect moving objects?</i> <i>Non-contact force</i> <i>What is a non-contact force?</i> <i>How is this different to a contact force?</i> <i>Magnetic force</i> <i>How do magnets attract and repel?</i> <i>Which materials are magnetic? Forces and magnetism summary.</i>	<i>Seeing</i> <i>Do we need light to see things?</i> <i>Shadows</i> <i>How are shadows formed?</i> <i>Changing variables</i> <i>What happens to the size of a shadow when the object moves closer to, or away from, the light source?</i>	<i>Flowering plants</i> <i>What are the parts of a flowering plant? What do they do?</i> <i>Food and survival</i> <i>Do all plants need the same things to thrive and grow?</i> <i>How do leaves make food for the plant?</i> <i>How does water move through a plant?</i> <i>Flower function</i> <i>What do flowers do?</i> <i>What is pollination?</i>

Year Four Key Vocabulary and End Points				
Living things and their habitats	States of matter	Animals including humans	Electricity	Sound
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>Classification, environment, interdependence, interact, beneficial, hierarchy</i>	<i>permanent ,particle, solid, liquid, gas, vapour</i>	<i>Expel, compact, digestion, acid, stomach, intestines</i>	<i>Associate, identify, portable, effect, appliance, series</i>	<i>Produce, property, source, frequent. Regular, affect</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Vertebrate, invertebrate, biotic, ecosystem, species, niche</i>	<i>Evaporate, condense, melt, matter, state, volume</i>	<i>Incisor, canine, molar, enzyme, saliva, peristalsis</i>	<i>Component, electrical, insulator, electrical, conductor, circuit, hypothesis, variable</i>	<i>Vibrate, pitch, volume, medium, vacuum, sound wave</i>
End Points	End Points	End Points	End Points	End Points
<i>Living things</i> <i>What are the characteristics of living things?</i> <i>Vertebrates and invertebrates</i> <i>What animals are vertebrates?</i> <i>What animals are invertebrates?</i> <i>Plants</i> <i>What groups are plants classified in?</i> <i>Classification keys</i> <i>What is classification?</i> <i>How do I use a key?</i> <i>Environmental changes</i> <i>What happens if the environment in a habitat changes?</i>	<i>What is matter?</i> <i>What does 'state' mean?</i> <i>What are solids, liquids and gases?</i> <i>Melting: how do materials change state?</i> <i>Evaporating: how do materials change state?</i> <i>Condensing: how do materials change state?</i> <i>Summary: how do materials change their state of matter?</i>	<i>Teeth and eating</i> <i>What teeth do humans have? What do they do?</i> <i>How does our mouth and teeth help digestion?</i> <i>What's the process?</i> <i>Can teeth tell us what animals eat?</i> <i>The digestive system</i> <i>What are the parts of the digestive system?</i> <i>What do they do?</i> <i>How does digestion work? What's the process?</i> <i>Food chains</i> <i>What are food chains How do they work?</i> <i>How do I construct and interpret a food chain?</i> SUMMARY	<i>Sources of electricity</i> <i>What appliances use electricity? What sort of power makes them work?</i> <i>Components</i> <i>Name it - what are the components in a simple series circuit?</i> <i>Apply what you know</i> <i>Diagnose it – what are the effects of changing circuit components and batteries?</i>	<i>Properties</i> <i>What is sound?</i> <i>Movement</i> <i>How does sound travel?</i> <i>Pitch and loudness</i> <i>What is the pitch and loudness of sound?</i>

		How are teeth, digestion and food chains connected?		
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Year Five Key Vocabulary and End Points				
Properties and changes of materials	Animals, including humans	Forces	Earth and Space	Living things and their habitats
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>property ,particle, separate, combine, recover, comparative</i>	<i>Development, diverse, unique, generation, mature, equipped</i>	<i>Opposite, reaction, advantage, displace, weight, mass</i>	<i>Luminous, phenomenon, attraction, approximately, relative, apparent</i>	<i>Deduce, process, re-form, transform, adolescence, contrast</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Atom, molecule, chemical (changes), physical (changes), reversible, reaction</i>	<i>Adolescence, puberty, gestation, embryo, foetus, womb</i>	<i>Pulley, gear, pivot, fulcrum, lever, upthrust</i>	<i>Orbit, axis, crescent, gravitational, waxing, waning</i>	<i>Embryo, sexual, metamorphosis, incubate, biochemical, fertilisation</i>
End Points	End Points	End Points	End Points	End Points
<i>Properties, mixtures and solutions What properties do materials have? How do we use them? What is a mixture? What is a solution? (Solubility) Separation of materials How can we separate materials from a mixture? (Sieving and filtration) How can we separate materials from a solution? (Evaporation) Reversible and irreversible change What changes are reversible? What changes</i>	<i>Life What is the human timeline? Growth How do we change into adults? Compare How do human and animal lifespans compare?</i>	<i>Non-contact and contact forces Remember gravity. When is friction helpful and when is it not? Resistance What is the effect of air resistance? Air resistance investigation Inspirational scientist Who was Galileo Galilei? Resistance What's the effect of water resistance? Levers, pulleys and gears How do levers help us? How do pulleys and gears help us?</i>	<i>Position, relationship / movement of planets / spherical bodies. What are the planets in our solar system? (Planet comparison) How does the view of the Moon change in a solar month? (Moon phases, moon diaries) The effect of the Earth's rotation, tilt and orbit has on day, night and seasons. Why does the rotation of the Earth result in day and night?</i>	<i>Mrs GREN – Recap of life processes Life Cycles What's the difference between a mammal and amphibian? What's the difference between an insect and a bird? What is similar and what is different between the life cycle of a mammal, amphibian, insect and bird? Inspirational scientists Who was Maria Merion and what did she do?</i>

are irreversible?			Why is the Earth's tilt (axis) responsible for the seasons?	Reproduction How do living things reproduce? Plants and animals – what's the life process of reproduction.
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Year Six Key Vocabulary and End Points				
Living things and their habitats	Light	Animals, including humans	Electricity	Evolution and Inheritance
Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary	Tier Two Vocabulary
<i>Characteristic, Interdependence, Specific, Categorise, Primitive, Hierarchy</i>	<i>Impurity, Emit, Absorb, Constituent, Filter, Artificial</i>	<i>Cell, Chamber, System, Circulation, Vessel, Clot, Filter, Expel, Substance, Function, Regulate, Transform</i>	<i>Component, Consequence, Systematic, Represent, Source, Generate</i>	<i>Characteristic, Adaptation, Acquire, Theory, Modify, Generation</i>
Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary	Tier Three Vocabulary
<i>Fungus, Arthropod, Taxonomy, Kingdom, Phylum, Genus</i>	<i>Refraction, Incidence, Spectrum, Prism, Lux, Piment</i>	<i>Plasma, Platelet, Artery, Capillary, Vein, Ventricle, Kidney, Bladder, Urine, Excretion, Toxin, Nutrient</i>	<i>Proton, Neutron, Electron, Terminal, Series, Voltage</i>	<i>Evolve, Survival, Species, Clone, Inherit, Fossil</i>
End Points	End Points	End Points	End Points	End Points
<i>Pioneering scientists Who was the scientist Carl Linnaeus and what did he do? Classification How do we classify vertebrates? How do we classify invertebrates we know? How do we classify invertebrates we don't know?</i>	<i>Properties of light How does light travel? What colour is light made of? Reflection Reflection - how does light help us to see objects? Which surfaces make the best reflectors? Colour Why do we see objects as</i>	<i>Blood and blood vessels What is blood made of and why do we need it? Why do our bodies need nutrients and how are they transported? What is our circulatory system? The functions of the heart What is our heart like inside? How does it work? Who influenced what we</i>	<i>Do-it What is electricity? How does it work? How do we build and represent a series circuit? What are the components in a series circuit? Test-it How does the number of cells and voltage affect components in a circuit? Diagnose-it</i>	<i>Change over time How have living things changed over time? How do we know? How has life evolved over time? Biological change What is DNA and what does it do? Are all offspring identical to their parents? Theories of evolution</i>

<p>How do we classify invertebrates we don't know?</p> <p>Apply</p> <p>What animals can I classify?</p> <p>What animals and plants exist in my local environment?</p>	<p>a particular colour?</p> <p>Refraction</p> <p>What happens to the appearance of objects when placed in water?</p>	<p>know about our circulatory system?</p> <p>The effect of exercise, drugs and lifestyle</p> <p>What can we do to keep healthy? Present and explain what we know about the circulatory system, nutrients and keeping healthy.</p> <p>Digestion and circulation</p> <p>Remember circulation and digestion: how are these two systems connected?</p> <p>Removal of waste</p> <p>Where are the kidneys and what do they do?</p> <p>Keeping healthy</p> <p>How do kidneys keep us healthy?</p>	<p>What are the effects and consequences of changing circuit components and batteries?</p>	<p>Darwin and Wallace – what evidence did they share to argue the case for evolution?</p> <p>Survival of the fittest - how have animals adapted and evolved to suit their environment?</p>
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