

Year 1	Year 2	Year 3	Year 4	Year 5
<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. Notice that some forces need contact between two objects, but magnetic forces can act at a distance. 	<ul style="list-style-type: none"> 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. 	<p>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.</p> <ul style="list-style-type: none"> 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.



MATERIALS (CHANGES) - YEAR 5

object material wood plastic glass metal water rock brick paper fabrics elastic foil card/cardboard rubber wool clay	hard soft stretchy stiff bendy/floppy waterproof absorbent breaks/tears rough smooth shiny elastic dull see through not see through	suitable/unsuitable use/useful object material property wood plastic glass metal water rock brick paper fabrics elastic foil card/cardboard rubber wool clay hard soft stretchy rigid flexible	waterproof absorbent strong/weak rough smooth reflective non reflective transparent opaque translucent shape changed push/pushing pull/pulling twist/twisting squash/squashing bend/bending stretch/stretching pinch/pinching poke/poking roll/rolling squeeze/squeezing	rock stone pebble boulder soil fossils grains crystals hard/soft texture absorb water let water through marble chalk granite sandstone slate sandy soil clay soil chalky soil peat	states of matter solid liquid gas air oxygen powder grain/granular crystals change state ice/water/steam let water vapour heated/heating cooled/cooling temperature degrees Celsius melt freeze solidify melting point molten boil boiling point Evaporate evaporation	Condense condensation water cycle precipitation transpiration	dissolve solution soluble insoluble solute solvent particle mix/mixture filtering sieving evaporating residue condensing reversible changes burning gas given off rusting solubility electrical conductivity thermal conductivity
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EARTH & SPACE– YEAR 5



Year 1	Year 5		KS3	
<ul style="list-style-type: none"> • Observe changes across the four seasons. (Y1 - Seasonal changes) • Observe and describe weather associated with the seasons and how day length varies. (Y1 - Seasonal changes) 	<ul style="list-style-type: none"> • 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. 		<ul style="list-style-type: none"> • Gravity force, weight = mass x gravitational field strength (g), on Earth $g=10 \text{ N/kg}$, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only) • Our Sun as a star, other stars in our galaxy, other galaxies. • The seasons and the Earth’s tilt, day length at different times of year, in different hemispheres. • The light year as a unit of astronomical distance. 	
	sound sound source noise vibrate/vibration travel solid/liquid/gas pitch tune high/low volume loud/quiet	fainter muffle strength of vibrations insulation instrument percussion strings brass woodwind tuned instrument		

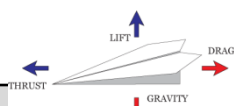
N.B. Use OGDEN resource kits to support planning/teaching



LIVING THINGS & THEIR HABITATS – YEAR 5

Year 1	Year 2	Year 3		Year 4	Year 5	
<p>identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <ul style="list-style-type: none"> Identify and describe the basic structure of a variety of common flowering plants, including trees 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 <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets</p> <ul style="list-style-type: none"> Observe changes across the four seasons. 	<ul style="list-style-type: none"> 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 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 <p>Notice that animals, including humans, have offspring which grow into adult</p>	<ul style="list-style-type: none"> explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 		<ul style="list-style-type: none"> recognise that living things can be grouped in different 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. Construct and interpret a variety of food chains, identifying producers, predators and prey 	<ul style="list-style-type: none"> 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 	
<p>names of locally found wild plants names of locally found garden plants names of locally found flowering plants names of locally found trees leaf/leaves flower Blossom stalk Petal fruit berry root bulb seed trunk branch stem Bark</p>	<p>living dead never been alive move grow feed have offspring/young/babies name local habitats name micro-habitats damp/wet/dry dark/light hot/warm/cool/cold use comparatives e.g. hotter suited/suitable basic needs depend food food chain</p>	<p>leaf/leaves flower blossom petal fruit berry root bulb seed trunk branch stem bark stalk water light air nutrients soil</p>	<p>damp/wet/dry dark/light hot/warm/cool/cold use comparatives e.g. hotter grow/growth healthy transported life cycle pollination seed formation seed dispersal fertiliser</p>	<p>classification keys environment fish amphibians reptiles birds mammals vertebrates invertebrates name some invertebrates human impact name positive human impact name negative human impact</p>	<p>life cycle reproduction sexual asexual Germination pollination seed formation seed dispersal pollen stamen stigma plantlets e.g. spider plant runners e.g. strawberry plant</p>	<p>mammal amphibian insect bird fish reptile eggs live young</p>

Y5 Forces



Year 2

Year 3

Year 5

- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)

- 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.

object
material
wood
plastic
glass
metal
water
rock
brick
paper
fabrics
elastic
foil
card/cardboard
rubber
wool
clay

hard
soft
stretchy
stiff
bendy/floppy
waterproof
absorbent
breaks/tears
rough
smooth
shiny
dull
see through
not see through

force
push/pushing
pull/pulling
contact force
non contact force
magnetic force
magnet
strength
bar magnet
ring magnet
button magnet
horseshoe magnet
attract
repel
magnetic material
metal
iron
steel

non magnetic material
poles
north pole
south pole

fall
Earth
gravity

air resistance
water resistance
friction
moving surfaces
mechanisms
levers
pulleys
gears
force
transfers

weight
mass

ANIMALS INCLUDING HUMANS – YEAR 5 Growth & Puberty – LINK PSHE/SRE

Year 1/2			Year 3		Year 4	Year 5/6
<p>Y1</p> <ul style="list-style-type: none"> 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. <p>Y2</p> <ul style="list-style-type: none"> 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. 			<ul style="list-style-type: none"> 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. 		<ul style="list-style-type: none"> 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. 	<p>Y5</p> <ul style="list-style-type: none"> Describe the changes as humans develop to old age. Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats) Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats) <p>Y6</p> <ul style="list-style-type: none"> 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. 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. (Y6 - Living things and their habitats) Give reasons for classifying plants and animals based on specific characteristics. (Y6 - Living things and their habitats)
<p>names of common animals names of common animals (eat other animals) names of common animals (eat plants) names of common animals (eat plants and animals) wild animals pets body head neck arms elbows legs knees face ears eyes eyebrows eyelashes nose hair mouth teeth tongue feet</p> <p>Adult vocab: fish, amphibians Reptiles, birds., mammals, carnivores, herbivores, omnivores</p>	<p>toes fingers nails ankle calf thigh hips waist trunk chest shoulders back hands wrist tail wing claw fin scales feathers fur beak senses hear/hearing see/seeing touch/touching smell/smelling taste/tasting rough/smooth bright/dim loud/quiet high/low Repeating-continuous (sound)</p>	<p>offspring young grow change adults older/younger baby/toddler/child / teenager basic needs water food air breathing survival exercise food types fruit and vegetable bread, rice, potato, pasta milk and dairy foods foods high in fat or sugar meat, fish, egg, beans hygiene clean wash healthy medicine drugs</p> <p>Will be introduced to nutrition and nutrients in year 3 so avoid protein, carbohydrates etc</p>	<p>nutrition nutrients food types fruit and vegetable bread, rice, potato, pasta milk and dairy foods foods high in fat or sugar meat, fish, egg, beans carbodrates protein vitamins and mineral fat dietry fibre water balanced diet</p>	<p>skeleton muscles support protection movement skull ribs spine/vertebra joints sockets bones tendons vertebrate/invertebrate</p>	<p>digestive system nutrition nutrients mouth teeth canines incisor molar pre-molar saliva tongue rip, tear, chew, grind, cut oesophagus (gullet) stomach small intestine large intestine rectum anus carnivore herbivore ominvore producer consumer predator prey food chain</p>	