



Science Assessment Tracking – Knowledge - Year 5/6

		Working Towards	On Track
Cycle A		identify and describe the basic structure of a variety of common flowering plants, including trees	identify and describe the functions of different parts of flowering plants: roots, stem/trunk leaves and flowers
		find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	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
		observe and describe how seeds and bulbs grow into mature plants	investigate the way in which water is transported within plants
		observe changes across the four seasons	explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
		compare and group materials together, according to whether they are solids, liquids or gases	compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets
		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	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
		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 and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (including the pulse and clotting).
		describe the simple functions of the basic parts of the digestive system in humans	recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
		identify the different types of teeth in humans and their simple functions.	describe the ways in which nutrients and water are transported within animals, including humans
		construct a simple series electrical circuit identifying and naming the basic parts of a simple electrical circuit, including cells, wires, bulbs, switches and buzzers	associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
		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	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
		recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	use recognised symbols when representing a simple circuit in a diagram
		recognise some common conductors and insulators, and associate metals with being good conductors	
		recognise that they need light in order to see things and that dark is the absence of light	recognise that light appears to travel in straight lines
		notice that light is reflected from surfaces	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
		recognise that shadows are formed when a light source is blocked by a solid object	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
		find patterns in the way that the size of shadows change	use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Plants	Properties and changes of materials.	Animals including humans	Electricity	Light	<p>Once an objective has been covered it becomes Bold</p> <p>It is assumed child has achieved this objective at 'on track' unless they are indicated at WT.</p>
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		Working Towards	On Track
Cycle B	explore the part flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal		describe the difference in the life cycles of a mammal, an amphibian an insect and a bird
	explore and use classification keys to help group, identify and name a variety of living things in their local environment		describe the life process of reproduction in some plants and animals
	compare and group materials together, according to whether they are solids, liquids or gases		give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic
	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		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, include changes associated with burning and the action of acid on bicarbonate of soda
	recognise that environments can change and that this can sometimes pose dangers to living things		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
	recognise that they need light in order to see things and that dark is the absence of light		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
	recognise that light from the Sun can be dangerous and that there are ways to protect our eyes		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
	compare how things move on different surfaces		explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
	notice that some forces need contact between two objects but magnetic forces act at a distance		identify the effect 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

Living things and their habitats	Properties and changes of materials	Evolution and inheritance	Earth and Space	Forces	<p>Once an objective has been covered it becomes Bold</p> <p>It is assumed child has achieved this objective at 'on track' unless they are indicated at WT.</p>
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