



**Science Sequence of Learning**  
 (Link to [POS Science Knowledge Progression \(2023\)](#))



Progression from EYFS Curriculum - The Connected Curriculum - <a href="#">EYFS Knowledge and Skills Progression</a> (Knowledge and Understanding of the World) <a href="#">EYFS Long Term Plan</a>						
Sequence of Learning Y1 - Y6						
Year	Working scientifically	Scientific discipline			Vocabulary (Tier 3)	
		Biology	Physics	Chemistry	Theme specific	Subject specific
Year 1	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants <a href="#">Summer 1 &amp; 2</a> Animals inc Humans Living things and their habitats  <a href="#">Plants (2023)</a> (New)	Seasonal changes	Materials	leaf/leaves, flower/blossom trunk, branch stem, stalk, petal root, soil, fruit berry, seed, bulb food	<b>KEY STAGE 1</b> identify describe observe question answer sort compare contrast classify equipment data measurement patterns enquiry
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants <a href="#">Animals inc Humans Spring 1 &amp; Spring 2</a> Living things and their habitats	Seasonal changes	Materials	common animals wild, tame, pets fish, reptile, baby cub, pup, nest family, egg, mouth, neck, eyes, teeth, wing claw, tail, beak fur, feather, fin scales	
	Predict Observe	Plants Animals inc Humans	Seasonal changes	<a href="#">Materials Autumn 1 &amp; 2</a>	object, material wood, plastic	

	<p>Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Living things and their habitats</p>		<p>☰ <b>Materials (2023)</b> <b>(New)</b></p>	<p>glass, metal water, rock rough/smooth bright/shiny, cloudy, dim/dull strong/weak waterproof bendy/stiff, soft/hard see-through, melt freeze boil burn</p>	
	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Animals inc Humans Living things and their habitats</p>	<p>Seasonal changes</p> <p>☰ Seasons (2023) (New)</p>	<p>Materials</p>	<p>seasons spring summer autumn winter temperature rain snow sleet hailstone sunshine breeze wind ice climate difference</p>	
<p>Year 2</p>	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Spring 2 Animals inc Humans Living things and their habitats</p>	<p>Seasonal changes</p>	<p>Materials</p>	<p>growth seedling shoot mature healthy wither healthy (i.e soil) nutrients structure function germinate pollination seed dispersal</p>	

	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants <a href="#">Animals inc Humans Summer 1 &amp; 2</a> Living things and their habitats  <input type="checkbox"/> Animals including... (New)	Seasonal changes	Materials	amphibian mammal adult young toddler child teenager develop insect live young brain heart lungs skeleton bones eyebrows wrist ear lobe etc
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats	Seasonal changes	<a href="#">Materials Spring 1</a>	man-made natural suitable useful function purpose property rust transparent reflection rigid flexible solid liquid molten gas boiling point Heat pressure
Predict Observe	Plants Animals inc Humans	Seasonal changes	Materials	living, dead, never been alive,	

	<p>Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Living things and their habitats Autumn 1 &amp; 2</p> <p>Living things and ... (New)</p>			<p>habitat, woodland, forest, desert, ocean, rainforest, microhabitat, food chain, food source, environment, predator, prey, producer, suited, adapted</p>	
Year 3	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Autumn 1 &amp; Summer 1 Animals inc Humans Living things and their habitats Evolution and inheritance</p> <p>Science Knowle... (New)</p>	<p>Electricity Forces Seasonal changes Light Sound Earth and space</p>	<p>Materials Rocks States of matter</p>	<p>absorb fertiliser transported pollination seed formation carpel stigma style ovary stamen anther pollen sepal</p>	<p><b>KEY STAGE 2</b> prediction conclusion evidence explanation diagram systematic comparative test fair test construct interpret accurate variables causal relationships improve precision quantitative</p>
	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Animals inc Humans Autumn 2 Living things and their habitats Evolution and inheritance</p> <p>Animals including... (New)</p>	<p>Electricity Forces Seasonal changes Light Sound Earth and space</p>	<p>Materials Rocks States of matter</p>	<p>skeleton muscles protection movement offspring vein/artery joints skull sockets tendon brain nutrition carbohydrate protein vegetable fruit dairy food group</p>	

					minerals
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes <b>Light Summer 2</b> Sound Earth and space	Materials Rocks States of matter	light beam speed of light reflect shadow prism opaque block/absorb
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity <b>Forces Spring 1</b> Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	gravity friction streamlined magnet attract/ repel air-resistance Newton Metre brass/aluminium/ copper North/South Pole
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Earth and space	Materials <b>Rocks Spring 2</b> States of matter	sedimentary igneous metamorphic fossils organic grains crystals boulder granule quartz characteristic impermeable lava/magma
Year 4	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate	Plants <b>Animals inc Humans Autumn 1</b> Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	digestive system digestion saliva oesophagus stomach small/large intestine

	<p>Research</p>	<p><a href="#">Animals including...</a> (New)</p>			<p>rectum anus faeces excrete chemical breakdown gastric juices reabsorb reabsorption endoskeleton exoskeleton dentin plaque pulp-cavity fluoride tooth decay gums nerves enamel canines incisors premolars molars cavities decay</p>	
	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Animals inc Humans <a href="#">Living things and their habitats Summer 2</a> Evolution and inheritance</p> <p><a href="#">Living Things and...</a> (New)</p>	<p>Electricity Forces Seasonal changes Light Sound Earth and space</p>	<p>Materials Rocks States of matter</p>	<p>classification key (in)vertebrates mould fungus organism population deforestation pollution positive/negative human impact variation biome vegetation region dominant environmental anemometer</p>	

					barometer
Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Spring 2 & Summer 1 Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	electrical device appliances circuit components conductor resister symbol cell battery wire bulb switch buzzer motor connection complete/open /closed circuit positive/negative crocodile clip alligator clip	
Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter Aut 2 <a href="#">States of matter</a> (new)	manufactured oxygen change of state solidify gaseous water vapour water cycle precipitation evaporation condensation degree Celsius waste sewage	
Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Autumn 2 Earth and space	Materials Rocks States of matter	sound source wave noise vibrate/vibration pollution pitch	

	Evaluate Research				volume dynamic echo tuning fork tone muffle mute soundproof drum guitar instrument families percussion timpani string brass woodwind soprano alto tenor bass	
Year 5	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Summer 1 Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	fertilisation birth uterus embryo ovary placenta chromosomes ovum zygote fallopian tubes gestation infancy arachnid mollusc crustacean sponge	
	Predict Observe Investigate Identify, classify and group Measure and record	Plants Animals inc Humans Living things and their habitats Evolution and	Electricity Forces Seasonal changes Light Sound	Materials Spring 1 & 2 Rocks States of matter	soluble solution solute solvent suspension	

	Interpret and conclude Evaluate Research	inheritance	Earth and space		filter mixture residue filtrate separation (ir)reversible changes conductor thermal insulator insulation combustion reaction
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans <a href="#">Living things and their habitats Summer 2</a> Evolution and inheritance	Electricity Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	sexual and asexual reproduction interdependence topography erosion seed formation plantlets clone runners transpiration
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity <b>Forces Autumn 1</b> Seasonal changes Light Sound Earth and space  <a href="#">Forces (2023) (New)</a>	Materials Rocks States of matter	mechanisms air & water resistance levers pulleys gears cams drag forces Transference buoyancy
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Sound <b>Earth and space Autumn 2</b>	Materials Rocks States of matter	axis/axes Mercury Venus Earth Mars Jupiter Saturn

	Research		<a href="#">Earth and Space (...)</a> (New)		Uranus Neptune Pluto celestial body spin sphere/spherical rotation elliptical orbit revolve asteroid meteor(ite) comet galaxy light year latitude longitude equator hemisphere prime /Green which Meridian time zone
Year 6	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Autumn 1 Evolution and inheritance  <a href="#">Living Things and...</a> (New)	Electricity Forces Seasonal changes Light Sound Earth and space	Materials Rocks States of matter	microorganisms invertebrates vertebrates classification  (revisit vocabulary from previous year group)
	Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research	Plants Animals inc Humans Living things and their habitats Evolution and inheritance	Electricity Forces Seasonal changes Light Summer 1 Sound Earth and space	Materials Rocks States of matter	refraction transmission optics  (revisit vocabulary from previous year group)
	Predict	Plants	<a href="#">Electricity Summer 2</a>	Materials	(revisit

	<p>Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Animals inc Humans Living things and their habitats Evolution and inheritance</p>	<p>Forces Seasonal changes Light Sound Earth and space</p> <p><a href="#">Electricity (2023)</a> (New)</p>	<p>Rocks States of matter</p>	<p>vocabulary from previous year group)</p>
	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Animals inc Humans Living things and their habitats Evolution and inheritance Spring 1 &amp; 2</p>	<p>Electricity Forces Seasonal changes Light Sound Earth and space</p>	<p>Materials Rocks States of matter</p>	<p>fossils inhabited offspring adaptation evolution inheritance variation species natural selection genes survival of the fittest chromosomes</p>
	<p>Predict Observe Investigate Identify, classify and group Measure and record Interpret and conclude Evaluate Research</p>	<p>Plants Animals inc Humans Autumn 2 Living things and their habitats Evolution and inheritance</p> <p><a href="#">Animals Including...</a> (New)</p>	<p>Electricity Forces Seasonal changes Light Sound Earth and space</p>	<p>Materials Rocks States of matter</p>	<p>bronchi diaphragm trachea gaseous exchange aorta pulmonary carbon dioxide air sac (de) oxygenated plasma red/white blood cells respiratory system clotting capillaries circulatory system blood vessels</p>