

Clifton Primary School - Science Curriculum Long Term Plan



		Autumn	Spring	Summer
Early Years	Cycle A	<p>Marvellous Me</p> <ul style="list-style-type: none"> -Describe their physical features and compare them to others – body parts -Recognise some environments are different to the one they live in -Understand the effects on the changing seasons on the natural world <ul style="list-style-type: none"> - Explore Autumn <p>Festivals</p> <ul style="list-style-type: none"> -Experiments linked to different celebrations such as Harvest, Bonfire Night, Diwali, Halloween, Christmas - Recognise some environments that are different to the one in which they live <ul style="list-style-type: none"> -Understand the effects on the changing seasons <ul style="list-style-type: none"> -Colour Mixing 	<p>Dinosaurs</p> <ul style="list-style-type: none"> -Learn about the different periods: Jurassic, Triassic, Cretaceous and Extinct <ul style="list-style-type: none"> -Explore fossils -Learn about carnivores/herbivores/omnivores and their diets – link to healthy eating <ul style="list-style-type: none"> -Learn about dinosaur body parts <ul style="list-style-type: none"> -Sorting and grouping animals -Life cycle (eggs) -Explore the habitats eg, swamp - Explore changing states of matter by freezing some dinosaur toys in ice. See where dinosaurs can escape the ice age the quickest! -Understand the effects on the changing seasons on the natural world <p>Food and Farming</p> <ul style="list-style-type: none"> -Learn about types of farming <ul style="list-style-type: none"> -Talk about the link between food and farming -Focus on local farms/food events (experience a farm) -Understand the key features of the life cycle of a plant -Look at the crops on a farm and where these crops are best grown <ul style="list-style-type: none"> -Link to Healthy eating -Understand the key features of the life cycle of an animal (farm animals) <ul style="list-style-type: none"> -Look at and be able to match mother animals and their young -Understand the effects on the changing seasons on the natural world around them in particular on farms 	<p>Terrific tales and Rhythmic Rhymes</p> <ul style="list-style-type: none"> -Tale/Rhyme specific learning linked to science such as: <ul style="list-style-type: none"> -Three Little pigs: House experiments (materials) -Goldilocks and the three Bears: Changing states of matter (Porridge too hot and too cold!) -Cinderella: Materials - Understand the effects on the changing seasons on the natural world around them <p>Fun at the Seaside</p> <ul style="list-style-type: none"> -Identify different physical features of the seaside including sand, sea, waves, rockpool, cliff, harbour <ul style="list-style-type: none"> -Explore the natural world around them and materials -Know what it feels like to have sand on your feet and paddle in the sea. <ul style="list-style-type: none"> -Know which animals live on the British coastline -begin to understand the need to respect and care for the natural environment and all living things <ul style="list-style-type: none"> -Understand the effects on the changing seasons along the coastline
	Cycle B	<p>Marvellous Me</p> <ul style="list-style-type: none"> -Describe their physical features and compare them to others – body parts -Recognise some environments are different to the one they live in -Understand the effects on the changing seasons on the natural world <ul style="list-style-type: none"> - Explore Autumn and Winter <p>Festivals</p> <ul style="list-style-type: none"> -Experiments linked to different celebrations such as Harvest, Bonfire Night, Diwali, Halloween, Christmas - Recognise some environments that are different to the one in which they live <ul style="list-style-type: none"> -Understand the effects on the changing seasons <ul style="list-style-type: none"> -Colour Mixing 	<p>Animals around the World</p> <ul style="list-style-type: none"> -Look at a selection of animals from the group below: Zoo, Woodland, Arctic/Antarctic, Safari, Jungle and pets <ul style="list-style-type: none"> -Visit local environments -Compare animals and their habitats -Explore the natural world immediately around them and what/who lives there -Understand the effects the changing seasons has on the environment and animals <ul style="list-style-type: none"> -Learn about nocturnal animals -Acknowledge any rare breeds and their protection/conservation and who works with them <ul style="list-style-type: none"> -Look at baby animals and their young and matching them <ul style="list-style-type: none"> -Explore working animals and their use of senses <ul style="list-style-type: none"> -adopt an animal <p>Ticket to Ride</p> <ul style="list-style-type: none"> -Explore modes of transport such as: car, bike, train, bus, boat, aeroplane, hot air balloon, barge, canal boat, ferry <ul style="list-style-type: none"> -Explore how different modes of transport work -Know what different modes of transport are used for and why <ul style="list-style-type: none"> -Talk about different types of bridges and why they are important 	<p>Terrific tales and Rhythmic Rhymes</p> <ul style="list-style-type: none"> -Tale/Rhyme specific learning such as: <ul style="list-style-type: none"> -Jack and the beanstalk: Planting beans and observing their changes -The Gingerbread Man: Sinking and floating (helping the gingerbread man cross the river) -Little Red Riding hood: Body parts - Understand the effects on the changing seasons on the natural world around them <p>Under the Sea</p> <ul style="list-style-type: none"> -Know which sea creatures we might find on the coast of Britain. <ul style="list-style-type: none"> -Look at the plant life under the sea -Know about the smallest and largest creatures in the sea. <ul style="list-style-type: none"> -Know that some of our food comes from the sea. -Know that we need to protect the environment and living things under the sea. <ul style="list-style-type: none"> -Know how plastic is affecting the seas and oceans. -Know who David Attenborough is and the impact he has had on us and our planet.

Year 1 & 2	Cycle A	<p>Everyday Materials CHEMISTRY</p> <p>Absorb, rough, Smooth, waterproof, metal, plastic, materials, properties, flexible, Transparent, opaque, physical</p> <p>Seasonal Changes: Weather (Day and Night) PHYSICS</p> <p>Dawn, dusk, mild, Rotate, soaked, weather Month, season, spring, summer, autumn, winter</p>	<p>Animals Including Humans BIOLOGY</p> <p>Blood, senses, Young, feathers, Fur, scales, Mammal, amphibian, Reptile, herbivore, carnivore, omnivore</p> <p>Science Week: Theme Week / Revisit Animals Including Humans</p>	<p>Plants Including Trees BIOLOGY</p> <p>Bud, trunk, branch, bark, seed, wild, nutrients Stem, deciduous, evergreen</p> <p>Revisit: Seasonal Changes: Weather (Day and Night) PHYSICS</p> <p>Dawn, dusk, mild, Rotate, soaked, weather Month, season, spring, summer, autumn, winter</p>
	Cycle B	<p>Living Things and their habitats BIOLOGY</p> <p>Thrive, depend, producer, consume, prey, predator, oxygen, nutrition, respiration, sensitivity, reproduction, excretion</p> <p>Animals Including Humans BIOLOGY</p> <p>Healthy, survive, exercise, heart, lungs, muscles, hygiene, larva, pupa. Vertebrates, invertebrates, metamorphosis</p>	<p>Everyday Materials CHEMISTRY</p> <p>Artificial, brittle, extracted, fabric, manufactured, natural, ceramic, durable, inflexible, reflective, rigid, translucent</p> <p>Science Week: Theme Week / Revisit Animals Including Humans</p>	<p>Plants BIOLOGY</p> <p>Wither, dormant, mature, bulb, anchor, sustain, germination, perennial, carbon dioxide, glucose, clone</p> <p>REVISIT Living Things and their habitats BIOLOGY</p> <p>Thrive, depend, producer, consume, prey, predator, oxygen, nutrition, respiration, sensitivity, reproduction, excretion</p>
Year 3 & 4	Cycle A	<p>States of matter CHEMISTRY</p> <p>Permanent, particle, solid, liquid, gas, vapour, evaporate, condense, melt, matter, state, volume</p> <p>Living Things and their Habitats BIOLOGY</p> <p>Classification, environment, interdependence, interact, beneficial, hierarchy, vertebrate, invertebrate, biotic, ecosystem, species, niche</p>	<p>Animals Including Humans (Y4) BIOLOGY</p> <p>Expel, compact, digestion, acid, stomach, intestines, incisor, canine, molar, enzyme, saliva, peristalsis</p> <p>Science Week: Theme Week / Revisit prior learning</p>	<p>Electricity (Y4) PHYSICS</p> <p>Associate, identify, portable, effect, appliance, series, component, electrical, insulator, electrical Conductor, circuit, hypothesis, variable</p> <p>Sound (Y4) PHYSICS</p> <p>Produce, property, source, frequent, regular, affect, vibrate, pitch, volume, medium, vacuum, sound wave</p>
	Cycle B	<p>Rocks CHEMISTRY</p> <p>Cemented, compacted, decay, prehistoric, soil, transform, fossil, igneous, magma, metamorphic, minerals, sedimentary</p> <p>Forces and magnets PHYSICS</p> <p>Consequence, contact, force, attract, north, south, Magnet, resistance, friction, repel, pole, magnetic field</p>	<p>Light PHYSICS</p> <p>Absence, cast (shadow), Impenetrable, reflect, Shadow, source (light), Constant, dependent, independent, illuminate, translucent, variable</p> <p>Science week: Theme Week / Rocks Revisit CHEMISTRY</p> <p>Cemented, compacted, decay, prehistoric, soil, transform, fossil, igneous, magma, metamorphic, minerals, sedimentary</p>	<p>Animals Including Humans (Y3) BIOLOGY</p> <p>Minerals, skeleton, Skull, voluntary, involuntary, nerves, biceps, triceps, vertebrae, vitamins, proteins, carbohydrates</p> <p>Plants (Y3) BIOLOGY</p> <p>Adapt, essential, Glucose, transport, variety, vital, transpiration, Stoma, pollination, stamen, pistil, photosynthesis</p>

Year 5 & 6	Cycle A	<p style="text-align: center;">Living things and their habitats (Y5) BIOLOGY</p> <p>Deduce, process, re-form, transform, adolescence, contrast, embryo, sexual, metamorphosis, incubate, biochemical, fertilisation</p> <p style="text-align: center;">Animals Including Humans (Y5) BIOLOGY</p> <p>Development, diverse, unique, generation, mature, equipped, adolescence, puberty, gestation, Embryo, foetus, womb</p>	<p style="text-align: center;">Light PHYSICS</p> <p>Impurity, Emit, Absorb, Constituent, Filter, Artificial, Refraction, Incidence, Spectrum, Prism, Lux, Piment</p> <p style="text-align: center;">Science Week: Theme Week / Revisit prior learning</p>	<p style="text-align: center;">Electricity PHYSICS</p> <p>Component, Consequence, Systematic, Represent Source, Generate, Proton, Neutron, Electron, Terminal, Series, Voltage</p> <p style="text-align: center;">Properties and changes of materials CHEMISTRY</p> <p>Property, particle, separate, combine, recover, comparative, atom, molecule, chemical (changes)t, physical (changes), reversible, reaction</p>
	Cycle B	<p style="text-align: center;">Earth and Space PHYSICS</p> <p>Luminous, phenomenon, attraction, approximately, relative, apparent, orbit, axis, crescent, gravitational, waxing, waning</p> <p style="text-align: center;">Evolution and Inheritance (Y6) BIOLOGY</p> <p>Characteristic, Adaptation, Acquire, Theory, Modify, Generation, Evolve, Survival, Species, Clone, Inherit, Fossil</p>	<p style="text-align: center;">Animals Including Humans Y6 BIOLOGY</p> <p>Cell, Chamber, System, Circulation, Vessel, Clot, Filter Expel, Substance, Function, Regulate, Transform, Plasma Platelet, Artery, Capillary, Vein, Ventricle, Kidney, Bladder, Urine, Excretion, Toxin, Nutrient</p> <p style="text-align: center;">Science Week: Theme Week Animals including humans – Water Transportation (Y6)</p>	<p style="text-align: center;">Forces PHYSICS</p> <p>Opposite, reaction, advantage, displace, weight, mass, pulley, gear, Pivot, fulcrum, lever, up thrust</p> <p style="text-align: center;">Living things and their habitats (Y6)</p> <p>Characteristic, Interdependence, Specific, Categorise, Primitive, Hierarchy, Fungus, Arthropod, Taxonomy, Kingdom, Phylum, Genus</p>