John Perryn Primary School (References are from the National Curriculum)

Connected Curriculum Framework - Whole School Overview – Science

	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<u>Human Body</u> Labels Senses How do senses help us experience the world?	<u>Materials/ Magnets and</u> <u>Seasons - Autumn and</u> <u>Weather</u> Everyday material What is an object/ material? What material are magnetic?	Taking Care of the World/ Seasons Winter and WeatherThe Earth's natural resources, conservation of natural resources, logging, recycling, how pollution is caused and can be prevented.	Animals and their needs/ Seasons - Spring and Weather Living things, naming/ grouping/ describing animals, how plants and animals obtain food, offspring, caring for animal babies, caring for pets. Can you leap like a frog?	Animals and their needs/ Seasons – Spring and Weather How plants and animals obtain food, offspring, caring for animal babies, caring for pets. Whose poo?	Plants/ Seasons: Summer and Weather The parts and functions of plants, food production, flowers and seeds, deciduous and evergreen, farming, crops, pesticides, harvest, from field to supermarket. What plants need to survive?
Year 2	The Human Body The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, preventing illness, germs and disease, animals and their offspring.	<u>Living Things in their</u> <u>Environments</u> Habitats: rainforest, desert, meadow and underground habitats. Food chains, oceans and undersea habitats, deep ocean habitats and habitat destruction and damage	<u>Electricity</u> Circuits, conductive and non-conductive materials, safety rules.	<u>Plants</u> Seeds and bulbs, plants and water, light, temperature, healthy plants	<u>Astronomy</u> Our solar system, orbit and rotation, sun, moon, planets, stars, constellations.	<u>Materials and Matter</u> Comparing materials, changing materials, concepts of atoms, matter, solids, liquids, gases, measurements
Year 3	The Human Body The digestive system, teeth and senses, a healthy diet, nutrition, vitamins and minerals, skeletons and muscles for support, protection and movement	<u>Rocks</u> Sorting rocks, how rocks are formed, hardness and permeability, fossils, soil	Light How light travels, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, how shadows change throughout the day.	<u>Cycles in Nature</u> Seasonal cycles and plants, animal migration. Life cycles of a plant and a frog.	<u>Plants</u> Functions of plants: roots, stem/trunk, leaves and flowers, Life and growth, variety of plants, water transportation, seed formation and dispersal	<u>Forces and Magnets</u> Forces, friction, magnets, magnetic poles, magnetic fields, law of magnetic attraction, compasses
Year 4	States of Matter and the <u>Water Cycle</u> Change of state, evaporation, condensation, precipitation, humidity, groundwater.	<u>Electricity</u> Electric current, series and parallel circuits, switches, closed circuit, open circuit, short circuit, conductors and insulators	<u>Sound</u> How sound is created, how sound travels, sound waves, speed of sound, pitch, intensity, the human voice, hearing, the human ear.	<u>The Human Body</u> The muscular system, the skeletal system, the nervous system, the digestive system, teeth	<u>Classification of Plants</u> <u>and animals</u> Cold-blooded or warm- blooded, vertebrates or invertebrates, characteristics of animal classes, classification of plants.	Ecology Habitats, interdependence of organisms and their environment, producers, consumers and decomposers, food webs, producers, predators and prey, fossils, man-made threats to the environment.

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Year	<u>Materials</u> Properties Separation /mixtures Reversible/irreversible changes	<u>Forces</u> Gravity/air and water resistance/friction,	Forces levers/ pulleys/ gears	Earth and Space Sun/ Earth/ moon/ solar system. Earth's rotation- day and night	<u>All living things</u> Life cycles - mammal/ amphibian/ insect/ bird Reproduction - plants and animals	<u>Animals including</u> <u>Humans</u> Reproduction Development
Year (Evolution and inheritance Fossil/ evolution Offspring /adaption	<u>All living things</u> Classification Micro-organism/plant/ Animals.	Animals including humans Human circulatory system- transportation water/ nutrients	<u>Animals including humans</u> Effects-diet, exercise, drugs and lifestyle	Light Straight lines/ reflection/ shadows	<u>Electricity</u> Circuit/ symbols/ components