

Science Medium Term Curriculum Map (A)

<i>Differentiation by input</i> <i>-Resources: see the weekly planning from HEP scheme</i> <i>Minimum Assessment for Learning strategies for all topics</i> - Long term memory development strategies= Recapping previous learning at the start of each new topic / Long term memory strategy linked to the objectives on this sheet for each week Scientific investigative skills taught throughout each unit Key words in red						
	Autumn term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Ruby Class N/R	Autumn & Our Environment LO 1: What can I see, hear and feel outside? LO 2: What happens in Autumn? LO 3: How is the weather changing? LO 4: What is the same and different in our environment? LO 5: How can we use our senses to explore? LO 6: How can we care for our environment? autumn, weather, season, environment, observe, senses, see, hear, feel, smell, change, same, different, leaves, tree, natural	Healthy Bodies & Food LO 1: What is healthy and unhealthy? LO 2: Why do we need food? LO 3: Where does food come from? LO 4: How do we use our senses when exploring food? LO 5: How do we keep our bodies healthy? LO 6: How can we look after our environment (e.g. recycling)? healthy, unhealthy, food, eat, drink, body, exercise, hygiene, taste, smell, grow, farm, plant, animal, recycle, environment	Weather & Seasonal Change LO 1: What is the weather like today? LO 2: What are the seasons? LO 3: How does winter change our environment? LO 4: What happens when things melt or freeze? LO 5: What do animals do in different seasons? LO 6: How are hot and cold places different? weather, season, winter, cold, hot, rain, snow, ice, melt, freeze, temperature, climate, habitat, animal	Growth, Change & Investigations LO 1: What can we find in our outdoor environment? LO 2: What are minibeasts and where do they live? LO 3: How do plants and animals grow and change? LO 4: What are our senses and how do we use them? LO 5: Which objects float and sink? LO 6: How can we make things move (push/pull)? minibeast, insect, habitat, plant, grow, life cycle, change, senses, sight, touch, smell, taste, hear, float, sink, push, pull	Water & Living Things LO 1: What is water and where does it come from? LO 2: How do we use water every day? LO 3: What lives in water? LO 4: What do plants need to grow? LO 5: How can we care for living things? LO 6: How can we stay safe around water? water, rain, river, sea, pond, plant, grow, needs, animal, habitat, living, non-living, clean, dirty, safety	Animals, Habitats & Forces LO 1: What animals live in different places? LO 2: How are animals the same and different? LO 3: How do animals survive in their habitats? LO 4: What forces can we feel (push, pull, gravity)? LO 5: What can fly and why? LO 6: What changes do we notice in summer? animal, habitat, environment, adapt, survive, similar, different, push, pull, force, gravity, fly, summer, change
Sapphire Class Year 1/2	Plants LO 1: What are seeds? LO 2: How do seeds grow? LO 3: What are bulbs? LO 4: How do bulbs grow? LO 5: What do seeds and bulbs need to grow? LO 6: Where do new plants come from? bulb, germinate, grow, light, seed, shoot, temperature, water	Uses of Everyday Materials LO 1: What material is best for this job? LO 2: What is the best waterproof material? LO 3: Can objects be made from different materials? LO 4: How can squashing change a shape? LO 5: How does bending or twisting change things? LO 6: How can we make things longer? bendy, change, flexible, hard, material, object, soft, stretch, strong, waterproof	Living things LO 1: What is alive? LO 2: What is dead? LO 3: Was it ever alive? LO 4: What do living things need? LO 5: What are some tricky objects? LO 6: Where can we find living things? alive, animals, dead, habitat, organism, plants, seeds, shelter	Local Habitats LO 1: What is a habitat? LO 2: What plants and animals live near us? LO 3: What is a microhabitat? LO 4: How do habitats meet needs? LO 5: How do living things depend on each other? LO 6: Can we compare different habitats? adapt, conditions, environment, habitat, microhabitat, organism, shelter, variety	Food Chains LO 1: What do animals eat? LO 2: Where does our food come from? LO 3: What is a food chain? LO 4: What do the arrows in a food chain mean? LO 5: How are humans part of the food chain? LO 6: What happens if a food chain is broken? carnivore, food chain, food source, habitat, herbivore, omnivore, predator, prey, producer	Growing up, Keeping healthy LO 1: What do animals need to survive? LO 2: How do baby animals grow? LO 3: What is a life cycle? LO 4: How do humans grow? LO 5: Why do we need to eat well? LO 6: Why are exercise and hygiene important? adult, balanced diet, child, exercise, germs, hygiene, life cycle, nutrition, offspring, survival
Diamond Class Year 3/4	Plants LO 1: What are the parts of plants? LO 2: What do plants need to grow? LO 3: How does water move through a plant? LO 4: Why do plants need flowers? LO 5: How do plants make new plants? LO 6: What are the stages of a plant life cycle? absorb, carbon dioxide, fertilisation, fertiliser, flowers, germination, minerals, nutrients, pollination, pollen	Rocks LO 1: What are some properties of rocks? LO 2: How do volcanoes make igneous rocks? LO 3: Where can we find fossils? LO 4: Can rocks be changed? LO 5: Can rocks be recycled? LO 6: Why is soil important? continents, fossil, lava, magma, meteorologist, mineralogist, palaeontology, porosity, pressure, rock, soil, temperature, waterlogged	Light LO 1: Light source or light reflector? LO 2: Transparent, translucent or opaque? LO 3: What makes a good reflector of light? LO 4: What is a shadow? LO 5: How can we protect our eyes from the sun? LO 6: How do telescopes work? iris, lens, light source, mirror, opaque, optician, pupil, reflection, shadow, telescope, translucent, transparent	Animals including Humans LO 1: How do living things get energy? LO 2: What do we need to eat? LO 3: How much is enough food? LO 4: What bones are in the human body? LO 5: Are humans and other animal's bones the same? LO 6: How do animals move? carbohydrates, carnivore, consumer, biceps, exoskeleton, fats, fracture, herbivore, hibernate, leukaemia, minerals, muscle, obesity, pescatarian, producer, proteins, starvation, tendon, triceps, vitamins	Forces and Magnets LO 1: How do we make things move? LO 2: What are some contact forces? LO 3: What are some non-contact forces? LO 4: Are all metals magnetic? LO 5: Can you make a magnet stronger? LO 6: Can magnets help us when we are lost? air resistance, attract, contact, friction, gravity, lubricant, magnetic force, non-contact, pull, push, repel, surface, twist, water resistance	The Bee Project LO 1: What is a bee? LO 2: What is inside a hive? LO 3: What do bees make? LO 4: How do bees communicate? LO 5: Who makes honey? LO 6: What is happening to bees? abdomen, antennae, colony, drone, hive, honey stomach, nectar, pollen, propolis, royal jelly, sting, thorax, waggle dance, venom
Emerald class Year 5/6	Animals including Humans LO 1: What is the circulatory system? LO 2: How does blood get around the body? LO 3: What is in the blood? LO 4: How do we get water and nutrients? LO 5: How can we keep our heart healthy? LO 6: What are some blood disorders? blood pressure, cardiac muscle, cholesterol, circulatory system, plasma, platelet, red blood cells, valves, veins, white blood cells	Light LO 1: How does light travel? LO 2: How does reflection help us see? LO 3: Can we increase reflection? LO 4: What shapes our shadows? LO 5: What causes rainbows? LO 6: Can we make a red apple blue? absorb, distort, opaque, periscope, ray, surgeon, translucent, transparent	Electric Circuits LO 1: How do electrical appliances work? LO 2: Why do batteries have voltage? LO 3: What are the parts of a circuit? LO 4: What are circuit diagrams? LO 5: How can we use electricity safely? LO 6: What is the history of electricity? circuit, component, electric shock, insulator, symbol, risk assessment, voltage	Evolution and Inheritance LO 1: What is variation? LO 2: Why do adaptations matter? LO 3: What are some animal adaptations? LO 4: How do plants adapt? LO 5: What can fossils reveal? LO 6: Who are key figures in evolution? adaptation, amber, camouflage, evolution, fossils, genes, natural selection, reproduction, species, variation	Living things and their habitats LO 1: How do we classify animals? LO 2: How do we classify plants? LO 3: What are microorganisms? LO 4: Are there some tricky classifications? LO 5: Can we study local habitats? LO 6: Who was Carl Linnaeus? adaptations, algae, bacteria, euglena, fungi, invertebrates, microorganisms, protozoa, pooter, taxonomy, viruses	Transition Science LO 1: How can we improve observations? LO 2: Acid or alkali? LO 3: How can we separate colours? LO 4: What can we affect photosynthesis? LO 5: How can we change sound? LO 6: How is energy transformed? acid, alkali, chromatography, chlorophyll, energy change, microscope, photosynthesis, pigments, pitch, sound waves