



Long Term Planning Overview: Science Curriculum

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Year R	Autumn KUW - Use all their senses in hands-on exploration of natural materials. – exploring outside provision and nature zone Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary Understand the effect of changing seasons on the natural world around them linked with wearing more clothes in Winter, days getting shorter and Christmas.		Spring KUW -. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things through rich texts and hands on experiences in discovery time. Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them linked to spring and things growing		Summer KUW – ELG -Explore the natural world around them, making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class lined to a trip to the farm Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Understand the effect of changing seasons on the natural world around them linked to changes in weather.	
Year 1	Autumn 1 Knowledge of scientific domain: Seasons Knowledge of working scientifically: Observe, present Concept: Energy	Autumn 2 Knowledge of scientific domain: Super Senses Knowledge of working scientifically: Ask questions Concept: Living Things	Spring 1 Knowledge of scientific domain: Material World Knowledge of working scientifically: Asking Questions, Set up simple test Concept: Materials	Spring 2 Knowledge of scientific domain: Material World Knowledge of working scientifically: interpreting Concept: Materials	Summer 1 Knowledge of scientific domain: Plant Detectives Knowledge of working scientifically: Measuring (model), Gathering and recording Concept: Living Things	Summer 2 Knowledge of scientific domain: Awesome Animals! Knowledge of working scientifically: Presenting (oral + T model diagrams etc), observing Concept: Living Things
Year 2	Autumn 1 Knowledge of scientific domain: Brilliant or Bizarre? (classify and identify) Knowledge of working scientifically: asking questions, observing Concept: Living things	Autumn 2 Knowledge of scientific domain: Brilliant or Bizarre? Knowledge of working scientifically: Presenting (oral + T Model diagrams) Concept: Living things	Spring 1 Knowledge of scientific domain: Marvellous Materials and their uses Knowledge of working scientifically: setting up tests (T plan) Concept: Materials	Spring 2 Knowledge of scientific domain: Marvellous Materials and their uses Knowledge of working scientifically: Gathering and recording, interpreting Concept: Living things	Summer 1 Knowledge of scientific domain: Seeds have Needs Knowledge of working scientifically: setting up tests, measuring Concept: Living things	Summer 2 Knowledge of scientific domain: Super humans! (Basic needs, Exercise, food and hygiene, offspring). Knowledge of working scientifically: observing, asking questions, measure Concept: Living things
Year 3	Autumn 1 Knowledge of scientific domain: Use the Forces Knowledge of working scientifically: Plan and setting up simple enquiries (comparative and fair), measurements – standard units Concept: Energy	Autumn 2 Knowledge of scientific domain: Use the Forces Knowledge of working scientifically: Presenting – tables and bar charts, conclude Concept: Energy	Spring 1 Knowledge of scientific domain: Chasing shadows (Light) Knowledge of working scientifically: Ask Questions, observing Concept: Energy	Spring 2 Knowledge of scientific domain: Let's Rock and Roll! Knowledge of working scientifically: predicting, interpret Concept: Materials	Summer 1 Knowledge of scientific domain: Funny Bones (nutrition, skeletons, muscles) Knowledge of working scientifically: Presenting, Gather and record Concept: Living things	Summer 2 Knowledge of scientific domain: Rooting for you - plants Knowledge of working scientifically: Observing over time, Gather and record Concept: Living things
Year 4	Autumn 1 Knowledge of scientific domain: Teeth and Digestion (digestion + food chain) Knowledge of working scientifically: gather and record Concept: Living things	Autumn 2 Knowledge of scientific domain: Good Vibrations - Sound Knowledge of working scientifically: conclusions, take measurements (data loggers) Concept: Energy	Spring 1 Knowledge of scientific domain: States of matter (temp changes states) Knowledge of working scientifically: Ask questions, plan and set up experiment. Concept: Materials	Spring 2 Knowledge of scientific domain: States of matter (continue) Knowledge of working scientifically: presenting (table/bar charts/line graphs), interpret results Concept: Materials.	Summer 1 Knowledge of scientific domain: Switch it up! (Electricity - simple circuits) Knowledge of working scientifically: prediction, interpret/conclude Concept: Energy	Summer 2 Knowledge of scientific domain: All All living things (classifying and habitat) Knowledge of working scientifically: Ask questions, presenting (keys) Concept: Living things
Year 5	Autumn 1 Knowledge of scientific domain: Gravity - Earth and Space - To infinity and beyond Knowledge of working scientifically: Observing, ask Q Concept: Earth and Space (inc Energy)	Autumn 2 Knowledge of scientific domain: Forces and Magnets - May the force be with you (Gravity, resistance, friction). Knowledge of working scientifically: Plan and set up enquiry, presenting and concluding Concept: Energy	Spring 1 Knowledge of scientific domain: The Science of States- Materials. (States of matter – separation, reversible v irreversible). Knowledge of working scientifically: Observing, measurements Concept: Materials	Spring 2 Knowledge of scientific domain: The Science of States- Materials- (States of matter – separation, reversible v irreversible). Knowledge of working scientifically: Predicting, Gather and record, interpret Concept: Materials	Summer 1 Knowledge of scientific domain: Life Cycles - The Circle of Life Knowledge of working scientifically: Asking Q, observing (group ad classify) Concept: Living Things	Summer 2 Knowledge of scientific domain: Human Changes (Puberty and changes) Knowledge of working scientifically: Observing, Ask Q Concept: Living Things

Year 6	Autumn 1 Knowledge of scientific domain: Evolution and inheritance Knowledge of working scientifically: Ask Q, Plan and set up (secondary sources) Concept: Living things	Autumn 2 Knowledge of scientific domain: Electricity - Eccentric Electricity (Series and Parallel) Knowledge of working scientifically: predicting, interpret Concept: Energy	Spring 1 Knowledge of scientific domain: Light - The Speed of Light (how it travels and is seen) Knowledge of working scientifically: Measurements, presenting Concept: Energy	Spring 2 Knowledge of scientific domain: Animals including humans. In a Heart Beat (circulatory system) Knowledge of working scientifically: gather and recording, conclusion Concept: Living things	Summer 1 Knowledge of scientific domain: Living things and their habitats. Classified! (Classification- genus, phylum) Knowledge of working scientifically: Observing, Present results Concept: Living things	Summer 2 Knowledge of scientific domain: Sex and relationships education Knowledge of working scientifically: Observing Concept: Living things
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Energy
Living Things
Materials