# TREALES SCHOOL CURRICULUM 2 YEAR ROLLING PROGRAMME

## Science PoS

| Year A | Step back in time/ Journeys<br>Infants – Everyday materials<br>LJ – States of matter/ Rocks and soils<br>UJ – Earth and Space, Evolution and Inheritance | Digging Deep/ Rulers<br>Infants – Plants and Humans<br>LJ – Sound<br>UJ –Properties and changes of material | Great Outdoors/Fire and Ice<br>Infants -Seasonal changes and classification<br>LJ – Plants (use biomes as examples)<br>UJ – Living things in their habitats |
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| Infants | Compare & group everyday materials by their properties<br>Identify and compare the uses of materials<br>Explore & investigate how materials can be changed | Identify, name, draw & label body parts including senses linked to PSED<br>Understand the importance of exercise, healthy eating & hygiene<br>Identify, describe and label African animals including fish, amphibians, reptiles, birds and mammals (including terms carnivores, herbivores, omnivores, food chains) linked to their habitat | Observe & describe 4 seasons- Autumn/Winter/Spring/Summer<br>Identify common plants & tree types; include description of structure<br>Identify, describe and label animals including fish, amphibians, reptiles, birds and mammals (including terms carnivores, herbivores, omnivores, food chains) linked to their habitat |
| LJ | Describe in simple terms how a fossil is formed<br>Recognise that soils are formed from rocks and other organic matter<br>Observe that some materials change state when they are heated or cooled<br>Identify the part played by evaporation and condensation in the water cycle | Know that sounds are made from vibrations<br>Recognise that sound vibrations travel through the air to the ear<br>Know that sounds get fainter as the distance from the sound increases | Identify and describe the functions of the parts of a flowering plant<br>Explore the part these parts play in the life cycle of a plant<br>Explore the requirements a plant has for growth and how water is transported<br>Recognise ways in which living things can be grouped<br>Recognise that environments can change posing dangers to living things |
| UJ | Describe the movement of the Earth/Moon and other planets relative to the sun in the solar system<br>Describe the sun, Earth and moon as approximately spherical bodies<br>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago | Know some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution<br>Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda | Have knowledge of the differences in the life cycles of a mammal, an amphibian, an insect and a bird<br>Have knowledge of the life process of reproduction in some plants and animals<br>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals |

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| | Recognise living things produce offspring of the same kind, but normally offspring vary & are not identical to parents | | |
| Year B | Into the Woods/ Explorers<br>Infants – Everyday materials and scientific investigation<br>LJ – Forces and magnets<br>UJ - Forces | Night night/ Let there be light<br>Infants – Seasonal changes, Nocturnal animals and day/night<br>LJ – Electricity and Light<br>UJ – Electricity and Light | Water, water everywhere/ Around the world<br>Infants – Classification and Identification, Living things in their habitats<br>LJ – Animals including humans<br>UJ – Animals including humans |
| Infants | Use and explore different scientific methods – floating and sinking | Observe & describe all 4 seasons including observations on length of days | Identify common plants & tree types; include description of structure<br>Identify, describe and label animals including fish, amphibians, reptiles, birds and mammals (including terms carnivores, herbivores, omnivores, food chains) linked to their habitat |
| LJ | Notice that some forces need contact between objects, but some can act at distance<br>Observe how magnets attract and repel each other<br>Describe magnets as having two poles | Identify common appliances that run on electricity<br>Construct a simple series circuit, identifying and naming its parts<br>Recognise that a switch affects if a lamp lights<br>Recognise common conductors and insulators<br>Recognise that we need light in order to see things<br>Notice that light reflects from surfaces<br>Know that light from the sun can be dangerous<br>Know that shadows are formed when light is blocked by a solid object | Understand the animals need the right types of nutrition and that they cannot make their own food<br>Identify that humans and animals have skeletons and muscles for support, protection and movement<br>Observe that some materials change state when they are heated or cooled<br>Identify the part played by evaporation and condensation in the water cycle |
| UJ | Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object<br>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces<br>Recognize that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit<br>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches<br>Recognize that light appears to travel in straight lines<br>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes | Describe the changes as humans develop to old age<br>Identify and name the main parts of the human circulatory system & describe the functions of the heart, blood vessels and blood<br>Recognize the impact of diet, exercise, drugs and lifestyle on the way their bodies function<br>Describe the ways in which nutrients and water are transported within animals, including humans |