Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	**Animals including Humans –** explore describing and labelling body parts (ones they can/can't), explore height of themselves vs a partner, which part of the body we use to see/touch/smell/ hear/taste? What are you feeling/tasting/smelling?	**Animals including Humans –** explore animal structures, skin coverings, features. Animal diet, naming animal, features of animals, describing, comparing, similarities/differences, sorting animals, where do we find animals.	**Everyday materials –** explore what they're made from, what is it, what materials, appearance, does the appearance change, hard or soft, stretchy, stiff, bendy, floppy, shiny smooth, waterproof or absorbent.	**Every day materials** - explore why materials are used for certain purposes, sorting objects, explore which cloth is most waterproof and which coat is most waterproof.	**Plants –** explore what are bulbs and what do they become when they grow, names of trees in our area, what are deciduous and evergreen trees, names of plants in our area, are all leaves the same, is a tree a plant, how are plants /trees different to each other.	**Plants** explore sorting/ grouping different plants/parts of plants, plants and trees changing during the year, main parts of plants and function, Identifying plants and trees/what skills can we use?
	Seasonal changes - changes in autumn: trees, leaves, weather, plants	**Seasonal changes** - changes to autumn/winter: trees, leaves, weather, plants	**Seasonal changes** - changes to winter: trees, leaves, weather, plants	**Seasonal changes** -changes to winter/spring: trees, leaves, weather, plants	**Seasonal changes** - changes to Spring: trees, leaves, weather, plants	**Seasonal changes** - changes to spring/summer: trees, leaves, weather, plants
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**
2	**Animals including humans** – focus on humans: their basic needs, importance of exercise and how their offspring grow into adults.	**Animals including humans –** focus on animals: their basic needs and how their offspring grow into adults.	**Everyday materials** – use senses to explore different materials and compare similarities and differences. Explore what types of material objects are made from.	**Everyday materials** – Investigate how to change the shape of different materials. Can you stretch/squash etc. Is the material flexible/rigid etc. Explore light and material	**Living things and their habitats –** understand living/ non-living/ dead. Why living things need food and shelter. Look at different habitats and micro-habitats. Explore food-chains.	**Plants –** explore different bulbs and seeds similarities and differences. The growing process: length, needs to grow, needs during growth, compare seeds and bulbs differences.
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**
3	**Rocks -** explore different types of rock and: density, porosity, usage and durability. Explore soil types and differences and fossil formation.	**Light –** explore sight, sources of light, reflection. Uses for opaque/translucent/ transparent materials. Explore shadow formation, size, colour and detail. Looking at light safely.	**Plants –** explore parts of the plant: stem, leaves, flowers. What is pollination, seed formation, seed spread. Look at leaf/root removal, water transportation, parts of a flowering plant, conditions of growth.	**Animals including humans –** Can animals produce food, what are nutrients, where are they, effect of them, need for: carbs, water, protein etc. Do all animals have skeletons, similarities/importance, joints and muscles relationship. Size of body part/performance.	**Forces/**magnets **–** What's a force, explore push/pull, explore when you need both movement on different surfaces applied to skier, ice skater etc. How can they use this to help them?	Forces**/magnets**: understand what a magnet is, poles, like/unlike, poles are all magnets the same, do magnets have to touch, does the magnetic force work through water/solid.
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**

4	**Sound –** explore sound production, travel, how we hear, mediums it travels through. Explore pitch and volume and if there are patterns between these and objects. Can we change pitch and volume? Does distance affect sound.	**Animals Including Humans-** explore food entering, digestion, breaking down food, where does it go, body usage of food, body waste, types of teeth including those used for digestion, in animals and humans, how we look after them, types of toothpaste, teeth damage. Food chains especially start, predator, producer, prey can you only be one of these?	**Electricity –** sort appliances, similarities and differences, explore circuits, making bulbs light up, explore switches, conductors and insulator materials, explore these in a circuit, what are wires/switches made out of and problem solving.	**Living things and their habitats-** explore what is a habitat, what's in our local habitat, identification of these, grouping living things: one/two criteria/ yes, no classification key. Naming and comparing local trees and leaves. Environmental change and problems resulting. What solutions do we have?	**States of matter –** explore solids, liquids and gases, similarities and differences. All gases been seen, all solids be poured. Explore melting and freezing and do liquids and solids all have the same freezing/melting point?	**States of matter** explore how do we measure temperature, what is evaporation, condensation, precipitation, how does the water cycle work, can we make ice melt more slowly/quickly?
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**
5	**Animals including humans –** explore life cycles – human and other mammals, main stages and compare them, dependency of humans. How do girls/boys become women/men, what is puberty, what are the changes, how is it different for boys and girl. Importance of activity especially as humans age.	**Forces –** do all forces do the same thing, gravity, investigate unsupported objects, contact forces, what's a mechanism, how does it affect forces – pulleys, leavers gears. Explore friction, air /water resistance, when might you want high/low. How do we measure forces, is gravity the same on the moon	**Earth and Space –** explore the sun as a star, the solar system including what is it, the number of planets, the names of the planets, distance from each other, different sizes. Investigate how the earth orbits the sun, and the moon orbits the earth and resulting changes. and sundials.	**Earth and Space –** explore and understand what an axis is, what happens while the earth spins. Investigate shapes of: sun, moon and earth. Explore the phases of the moon and explore show shadows are made linked to sundials	**Living things and their habitats –** explore Lifecyle of: mammals, amphibians, insects, birds, what makes these successful, how does the human life cycle compare, how are humans helping endangered animals complete these lifecycles. flowering plant reproduction, are all flowers the same? Explore plant (seed), amphibian, mammals, birds and insect's reproduction.	**Properties and changes of materials –** explore differences in materials, thermal and electrical conductivity? Explore mixture, solution, dissolving, sediments, separation. Look at change of state. Reversible and irreversible changes. Choosing materials.
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**
6	**Evolution and inheritance -** explore offspring are they identical? Look at characteristic of plants/animals and their habitats, effect of environment changes, look at new species and evolution, how have animals evolved, existence of living things from long ago, evidence of dinosaurs. Artificial breeding.	**Living things and their habitats –** explore characteristics or plants and animals, producer/consumer, classification of animals: vertebrates and invertebrates, then the characteristics or each of these. Microorganisms. Classification of plants and the characteristics of these. Carl Linus classification systems	**Electricity-** explore circuit operation, symbols and why they're used. Explore adding more cells to a complete circuit, cells with a higher voltage, more bulbs/buzzers/ motors to a circuit, switch off/open, size of a battery. Circuits used to solve a problem (a burglar alarm/ a dim light etc.). Difference and effect of a parallel and series circuit?	**Light –** explore light travel, sight, light sources, reflection, shadow creation, shadow depth, shadow and object shape correlation, distance between object and impact on shadow, periscopes and water effects on shadows.	**Animals including humans -** explore the insides of our bodies, impact of exercise, the circulatory system, function of the heart, blood vessels, blood and lung. Position of key organs, transportation of water/nutrients.	**Animals including humans -** How does the circulatory system work with the digestive system? Size and shapes of hearts, pulse rate – measurement, changes, resting pulse rate. Lifestyle: healthy, diet, exercise, drugs and their impact on the way our bodies function e.g. diabetes.
	Working Scientifically covered throughout the year.	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**	**Working Scientifically covered throughout the year.**