SCIENCE LONG TERM PLAN

KS1

Cycle	Autumn	Spring	Summer	
A (biology focus)	Animals including humans (Y1) Y1 – ID, name, describe common animals; carnivores, herbivores, omnivores, describe & compare structure -Identify name draw label parts of human body & know senses	Animals including humans (Y2) Y2 – Animals have offspring which grow into adults, know basic needs for survival -Humans need exercise, types of food, hygiene (egg, chick, frogspawn, tadpoles, pupa, butterflies, lamb, sheep)	Living things and Their Habitats (Y2) Y2 – Distinguish living, dead and things never been alive, habitats(microhabitats) provide for basic needs, ID and name variety animals/plants in habitats, simple food chains, sources of food	
	Playful child-centred investigations and experiments responding to current topic and children's interests	Playful child-centred investigations and experiments responding to current topic and children's interests	Playful child-centred investigations and experiments responding to current topic and children's interests	
Throughout	Seasonal changes – Autumn, Spring, Summer			
B (chemistry/bio focus)	Everyday materials (Y1) Y1 – ID, name, describe everyday materials and simple properties, distinguish between an object and material it's made from. Compare and group. Playful child-centred investigations and experiments	Uses of everyday materials (Y2) Y2 - ID, compare explore everyday materials & how solids can be squashed, bent, twisted Playful child-centred investigations and experiments	Plants (Y1&2) Y1 - Identifying/naming and structure of common plants/trees Y2 - Observe growth seeds bulbs & growing conditions Playful child-centred investigations and experiments proceeding to experiments and children's interactor	
Throughout	responding to current topic and children's interests responding to current topic and children's interests responding to current topic and children's interests Seasonal changes – Autumn, Spring, Summer			

Four year cycle – KS2

Cycle	Autumn	Spring	Summer
A	Animals including humans (Y4/6) Y4 – digestive system basics, teeth, food chains, predators, prey Y6- circulatory system, heart blood vessels, blood	Living things and their habitat (Y2 revision/Y5) Y2 – ID and name wide(r) variety of plants & animals in habitats, sort / classify/raise questions about environments Y5-Life process and reproduction in animals	Living things and their habitat (Y4/6) Y4 – Explore & use classification keys Recognise that environments can change & this can pose dangers to living things Y6-Classification system in detail
В	Electricity (Y4/Y6) Y4 – ID common appliances, simple series circuit, switches, conductors, insulators Y6 – brightness, volume, variations of components, switches, symbols to represent circuits	Light (Y3) Y3 - Darkness is absence of light, reflection of light, dangers of suns rays, shadows and patterns in way shadows change Light (Y6) Y6 - light travels in straight lines, explain in relation to eyesight, shadows	Sound (Y4) Y4 – How sounds made, vibrations travel to ear, patterns of pitch, volumes and vibration. Sounds getting fainter away from source
C	Animals including humans (Y3/5) Y3 - nutrition, skeleton, muscles Y5- Changes	Rocks/ Evolution & inheritance Y3- Compare & group rocks, fossils were living things trapped in rock, soil formation Y6- Fossils, varied offspring, adaptation & evolution Y6- Fossils, varied offspring, adaptation & evolution	Plants Y3 – Functions of different parts of flowering plants, requirements, investigate water in plants, flowers & seed dispersal Y6-Reproduction & plant lifecycle
D	States of matter (Y4) Y4 - Compare and group solids, liquids, gases -Materials change state when heated or cooled & research temp -Evaporation and condensation in the water cycle Properties and changes of materials (Y5) Y5- Compare and group by hardness, solubility, transparency, conductivity and response to magnets -Solubility & recovering substances from solution	Earth & Space (Y5) Earth & other planets are spherical bodies and describe movement in relation to the sun Movement of moon relative to earth Earth's rotation explains day and night and apparent movement of sun across the sky	Forces and magnets (Revise Y2 materials + Y3/Y5 Y3-How things move, magnets attract/ repel, compare using magnetic properties, poles Y5 - Gravity, air resistance, water resistance, friction, mechanisms incl. levers, pulleys and gears