Science Vocabulary Progression Grid

	Working Scientifically Vocabulary
FS	Observe, describe, compare, measure, name, design, record, guess, label
KS1	Question, find out, observe, describe, test, compare Measure, length, height, mass/weight, time, temperature Record, results, table, chart, pictograph, block graph, bar chart biology chemistry physics
Lower KS2	Research - relevant questions scientific enquiry comparative and fair test systematic, careful observation accurate measurements Equipment - thermometer, data logger Data - gather, record, classify, present KS1 Record - drawings, labelled diagrams, keys, bar charts, tables oral and written explanations conclusion predictions differences, similarities, changes evidence improve secondary sources guides, keys construct interpret
Upper KS2	Plan variables measurements accuracy precision repeat readings Report data - scientific diagrams, labels, classification keys, tables, scatter graphs, bar graph and line graphs predictions further comparative and fair test Report and present - conclusions, causal relationship, explanations, degree of trust, oral and written display and presentation. Evidence - support, refute ideas or arguments identify, classify and describe patterns systematic quantitative measurements

Foundation Stage	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Working Scientifically – Key Vocab What…? How ….?	**Working Scientifically – Key Vocab** observe change	**Working Scientifically – Key Vocab** gradually identify observe recognise	**Working Scientifically – Key Vocab** Similarities,	**Working Scientifically – Key Vocab** classify interpret	**Working Scientifically – Key Vocab** hypothesis

	Why …? similar different best and worst change plan look biggest and smallest compare sort and group	slowly quickly describe name identify label record measure bigger and smaller pattern notice cycle predict	investigate record units table fair evidence research length observations prediction	differences research and source scientists' discovery process cycle measurements conclude evaluate rank plan vary keep the same/constant bar graph table tally	pattern relationship prediction analyse interpret conclude evaluate rank variable constants control repeat key relationship line graph	variable constants evaluate plan conclude interpret classify categorise database enquiry control repeat support refute degree of trust scatter graph
FS – Key Science Vocabulary **Body Parts** Head, arms, leg, hand, foot, thigh, elbow, calf, earlobe, eyes, ears, mouth nose, stomach, back **Internal body parts** Heart, lungs, brain, kidneys, liver, stomach, muscles	**Seasonal Change – Key Vocab** Seasons; spring, summer, autumn, winter Year, months, weeks, days Hot, warm, mild, cold, sunny, cloudy, rain, sleet, snow, hail, thunder, lightning, rainbow Wet, damp, dry Windy, breezy, gust	**Animals including Humans – Key Vocab** Classification - Birds, fish, amphibians, reptiles, mammals, and invertebrates Classification - Carnivores, herbivores, omnivores Stages of growth of many insects – egg, larva, pupa, adult Names of some invertebrates – ladybirds, butterflies,	**Animals including Humans – Key Vocab** Nutrition, Diet, Vitamins, minerals, fats, proteins, and carbohydrates Functions of skeletons – protect, support and aid movement	**Living things and their habitats – Key Vocab** Habitat, micro habitat Pond, meadow, log pile, woodland, river, lake, beach, cliff Organism – plant, animal **Trees** - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine, holly, etc **Wild flowering plants**	**Properties and Changes in Materials – Key Vocab** **Thermal conductivity** – thermal conductor, thermal insulator **Electrical conductivity** – electrical conductor, electrical insulator **Dissolving** – Solvent, solution, solute, soluble, insoluble, solid, liquid, particles,	**Living things and their habitats – Key Vocab** Classification Vertebrate, invertebrate Kingdoms: animal, plant, 'micro-organism' Classes: amphibian, reptile, bird, mammal, Scales, feathers Flowering plant, non-flowering plant

	Temperature Degrees Celsius Thermometer Weathervane Anemometer	dragonflies, etc Names of some amphibians – smooth newt, common frog, toad Stages of life – baby, toddler, child, teenager, adult Life processes – growth, nutrition (feeding), respiration (breathing is part of this) Hygiene – clean, wash, germs Foods – healthy, grow, strong, energy		- cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, selfheal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow. **Garden plants** – crocus, daffodil, bluebells, etc **Parts of plants** – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs **Invertebrates** – snail, slug, woodlouse, spider, beetle, fly, etc **Pond animals** – pond skater, water slater, ramshorn snail, pond snail, leech, common frog, smooth newt, etc	suspensions **Separating materials** – Sieve, filter, evaporate, condense	

FS – Key Science Vocabulary	Animals including Humans – Key Vocab	Living things and their habitats – Key Vocab	Rocks – Key Vocab	States of Matter – Key Vocab	Forces – Key Vocab	Evolution and Inheritance – Key Vocab
Senses Smell, taste, see, hear, listen, touch, feel,	Birds, fish, amphibians, reptiles, mammals and invertebrates, feathers, scales, gills, fins, hair, land, water, backbone, skeleton, carnivores, herbivores, omnivores, meat, plants (Common parts/structures of animals), (Names of animals that can be found in the school grounds), (Names of animals that the children keep as pets)	Habitat, micro habitat Pond, meadow, log pile, woodland, river, lake, beach, cliff Organism – plant, animal **Trees** - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine , holly, etc **Wild flowering plants** - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear	**Names of rocks** – Chalk, limestone, granite, basalt, sandstone, flint, slate, shale, marble **Types of rock** – Sedimentary, metamorphic, igneous **Types of minerals** – Calcite, feldspar, topaz, diamond, talc, corundum **Properties of rocks** – Hard/soft, permeable/impermeable **Processes** – Heat, pressure, erosion, transportation, deposition, melt, solidify **Size of rocks** – Grain, pebbles **Rock describing words** – Crystals, layers **Early areas of land** – Gondwana, Pangea **Land formations** – Plates, volcanoes,	**States of matter** - Solid, liquid and gas **Examples of gases** (at room temperature and pressure) – Oxygen, hydrogen, helium, carbon dioxide, methane **Examples of liquids** (at room temperature and pressure) – Water, milk, juice, petrol, oil **Examples of solids** (at room temperature and pressure) –Wood, rocks, metal, plastic, glass, wool, leather, etc **Processes** – Melting, condensation, evaporation, solidifying, freezing **Water cycle** Water vapour	**Types of forces**: gravity, friction, air resistance, upthrust, weight Measuring forces: Newton meter, Newtons (N) Particles Surface area Push, pull Balance Mass – grams and kilograms Mechanical devices – gears, levers, pulleys, springs	Evolution, evolve Natural selection Survival Reproduction Offspring, parents, siblings Environment Variation Fossils, ammonites, belemnites, micrasters, etc

		thistle, white campion, white deadnettle and yarrow. **Garden plants** – crocus, daffodil, bluebells, etc **Parts of plants** – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs **Invertebrates** – snail, slug, woodlouse, spider, beetle, fly, etc **Pond animals** – pond skater, water slater, ramshorn snail, pond snail, leech, common frog, smooth newt, etc	mountains, valleys	Steam Heating Cooling		
FS – Key Science Vocabulary **Sounds** Loud, quiet, high pitch, low	**Everyday Materials – Key Vocab** **Types of materials**: wood, plastic, glass,	**Plants – Key Vocab** Trees - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut,	**Plants** **Trees** - deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse	**Electricity – Key Vocab** Electricity **Appliances**: fridge, freezer, TV,	**Earth and Space – Key Vocab** **Day and night** - Earth, axis, rotate	**Light** **Simple comparisons**: dark, dull, bright, very bright

pitch, ear, rhythm, tune, music, instrument	metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil **Properties of materials**: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky **Verbs associated with materials**: crumble, squash, bend, stretch, twist **Senses**: touch, see, hear, smell and taste	horse chestnut, apple, willow, sycamore, fir, pine , holly, etc **Wild flowering plants** - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, selfheal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle, and yarrow. **Garden plants** – crocus, daffodil, bluebells, etc **Parts of plants** – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs **Need of plants** – water, light, heat, temperature	chestnut, apple, willow, sycamore, fir, pine , holly, etc **Wild flowering plants** - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, self heal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle and yarrow. **Garden plants** – crocus, daffodil, bluebells, etc **Parts of plants** – roots, branch, trunk, stalk, leaf, flower, petal, seeds, bulbs and twigs **Parts of a flower** – petal, stamen (anther + filament), carpel (stigma + style + ovary + ovule) **Processes** – pollination, fertilisation, germination	computer, iron, kettle, etc Series circuit **Components**: battery, bulb (lamp), bulb (lamp) holder, buzzer, crocodile clip, leads, wires, switch **Describing words**: brighter, duller, slow, fast, quiet, loud Conductor, insulator **Effects of electricity**: Light, sound, movement, heat **Switches** – open, close	**Solar system** – Star = Sun, Planets = Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune (Pluto was classified as Dwarf planet in 2006) **Phases of the Moon** - full moon, gibbous moon, half moon, crescent moon, new moon, waxing ,waning Moon's orbit: 29.5 days, lunar month Orbit, planets, revolve, sphere	**Comparative vocabulary**: brighter, duller, and darker **Superlative vocabulary**: brightest, dullest, and darkest Opaque, translucent, transparent **Shadow** – block, absence of light Reflect – bounce, mirror, reflection See – light source Sun – sunset, sunrise, position

FS – Key Science Vocabulary	Plants – Key Vocab	Uses of every-day materials	Forces and Magnets – Key Vocab	Sound – Key Vocab	Living things and their habitats – Key Vocab	Electricity – Key Vocab
Human Growth Baby, toddler, child, teenager, adult, grow, change Height, tall, taller, short, shorter	**Trees-** deciduous, evergreen, ash, birch, beech, rowan, common lime, oak, sweet chestnut, horse chestnut, apple, willow, sycamore, fir, pine, holly, etc **Wild flowering plants** - cleavers, coltsfoot, daisy, dandelion, garlic mustard, mallow, mugwort, plantain, red clover, selfheal, shepherd's purse, sorrel, spear thistle, white campion, white deadnettle, and yarrow. **Garden plants** – crocus, daffodil, bluebells, etc **Parts of plants**	**Types of materials**: wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil **Properties of materials**: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky **Verbs associated with materials**: crumble, squash, bend, stretch, twist **Senses**: touch, see, hear, smell and taste	Magnets – bar and horseshoe Attract, repel North and south poles Magnetic Magnetic field	**Ways to create sound** – bang, blow, shake, and pluck **Loudness** – quiet, quieter, quietest, loud, louder and loudest **Pitch** - low, lower, lowest, high, higher, and highest Vibrations Source	**Animals** – amphibians, reptiles, birds, mammals, insects, fish **Animal development** – egg, larva, pupa, nymph, adult, metamorphosis **Parts of a flower** – petal, stamen (anther + filament), carpel (stigma + style + ovary + ovule) **Processes** – pollination, fertilisation, germination	Electricity, Volts Series circuit **Components**: battery, bulb (lamp), bulb (lamp) holder, buzzer, crocodile clip, leads, wires, switch **Describing words**: brighter, duller, slow, fast, quiet, loud Conductor, insulator Resistance **Effects of electricity**: Light, sound, movement, heat

	– roots, branch, trunk, stalk, leaf, flower, , blossom, petal, seeds, bulbs and twigs					
FS – Key Science Vocabulary **Properties of Materials** Soft, hard, rough, smooth, prickly, spiky, fluffy,			**Light – Key Vocab** **Simple comparisons**: dark, dull, bright, very bright **Comparative vocabulary**: brighter, duller, and darker **Superlative vocabulary**: brightest, dullest, and darkest Opaque, translucent, transparent **Shadow** – block, absence of light Reflect – bounce, mirror, reflection See – light source Sun – sunset, sunrise, position	**Animals including Humans – Key Vocab** Digestive system –, oesophagus, stomach, acid, small intestine Protein, vitamin, mineral, carbohydrate, fats, energy, growth, repair. Saliva Teeth – Incisors, canines, premolars, molars Function Food chain – producer, consumer, predator, prey	**Animals including Humans – Key Vocab** Gestation Foetus Fertilisation Species Baby Toddler Adolescent Adult Elderly person Puberty Hormones Pituitary gland Testosterone Oestrogen	**Animals including Humans – Key Vocab** Circulatory system – heart, blood, veins, arteries, pulse, clotting Diet – balanced, vitamins, minerals, proteins, carbohydrates, sugars, fats Drugs – caffeine, nicotine, alcohol, cannabis, cocaine, heroine Lifestyle – healthy