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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Reception****Cycle A****Objectives** **from development matters**  | Talk about what they see, using a wide vocabulary.Explore and talk about different forces they can feel.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. | Explore the natural world around them.Describe what they see, hear and feel whilst outside. | 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. | 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.Talk about the differences between materials and changes they notice. | 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. | Explore the natural world around them.Describe what they see, hear and feel whilst outside. |
| **Vocab** | Autumn, Winter, Spring Summer, senses, vocab associated with water/sand play – flow, tip etc, weather – rain, sun, wind, snow, clouds | waterproofbug names, habitat | float, sink, absorb | life cycle, grow, change, season names, seed, plant, water, sunlight | Autumn, Winter, Spring Summer, names of animals | animal names,habitats, seeds, crops, harvest, water, sunlight |
| **Reception****Cycle B****Objectives** **from development matters** | Talk about what they see, using a wide vocabulary.Explore and talk about different forces they can feel.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. | Talk about what they see, using a wide vocabulary.Explore and talk about different forces they can feel.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. | 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. | 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.Talk about the differences between materials and changes they notice. | Explore the natural world around them.Describe what they see, hear and feel whilst outside. | Explore the natural world around them.Describe what they see, hear and feel whilst outside. |
| **Vocab** | Names of seasons, senses, vocab associated with water/sand play – flow, tip etc, weather – rain, sun, wind, snow, clouds | Names of seasons, senses, vocab associated with materials/magnetic play –shiny, rough, smooth etc.weather – rain, sun, wind, snow, clouds | Freezing, melting, hot, cold, ice, frostAnimal names andHot and cold habitats | Life cycle, grow, change, season names, seed, plant, water, sunlight | Waterproof – wellies etc. Bug names, habitat | Float, sink, absorb |
| **Year 1** | **Animals including humans** (My body- identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense)**Seasonal changes**(Observe weather, day length and changes across seasons) | **Animals including humans**(Name common animals and name carnivores, herbivores, omnivores)(Become familiar with the common names of some fish, amphibians, reptiles, birds, animals and pets.) | **Materials** (Name, describe and sort everyday materials)**Seasonal changes**(Observe weather and changes across seasons) | **Use of Everyday Materials** (Uses of materialsDescribe simple properties) | **Plants**(Name basic parts and identify common plants.)**Seasonal changes**(Observe weather and changes across seasons) | **Plants**(Name basic parts and identify common plants.) |
| **Vocab** | body, human, head, shoulders, legs, feet, arms, ears, eyes, nose, mouth, fingers, senses, taste, touch, smell, hearing, sight, seasons, Autumn, weather | animals similaritiesmammals differencesbirds comparereptiles winterfish rainfallamphibians measureomnivore predictcarnivore herbivore | materialsfabricglassmetalplasticwoodstonedescribewaterproofexperimentabsorbroughdullbendyhardsoft stretchy shinyproperties  | describepropertieshardsoftstretchyfluffyrigidbendyidentifymaterialswood plasticfabricmetalobservesortgroup | PlantsSeedsFlowerPetalsGardenLeavesStemRootsLeavesBlossom | PlantsSeedsFlowerPetalsGardenLeavesStemRootsLeavesBlossom |
| **Year 2** | **Animals including humans** (Animals have offspring, basicneeds for survival, classifying animals)**Seasonal changes**(Observe weather, day length and changes across seasons) | **Living things and their habitats** (Living and dead, describe habitats, basic food chains) | **Use of Everyday Materials**(Uses of materialsChanging shape of materials)**Seasonal changes**(Observe weather and changes across seasons) | **Minibeasts** (Non- statutory links: exploring the local environment to explore and answer questions about plants and animals in their habitat, how to take care of animals in their habitats) | **Plants**(Observe and describe how seeds grow, find out what plants need to grow)**Seasonal changes**(Observe weather and changes across seasons) | **Plants**(Observe and describe how seeds grow, find out what plants need to grow) |
| **Vocab** | HumanAnimalOffspringGrow Adult Reproduce SurvivalAirWaterSleepFood | LivingDead Never livedAnimalsPlants HabitatFood chainProducer Basic needs for survival SuitedAdapted | hard / softstretchy / stiffshiny / dullrough / bendybendy / not bendywaterproof / not waterproofabsorbent / not absorbent  | habitat, micro-habitats, insects, houses, farm buildings, under bricks, damp, dark, dry, light, natural environment | SeedLightWaterNutrientsTemperatureHabitatVariableMeasureChangePlanScientificPlants | SeedLightWaterNutrientsTemperatureHabitatVariableMeasureChangePlanScientificPlants |
| **LKS2 Cycle A** | **Animals including humans** (Digestive system, teeth and food chains etc) | **Sound** (How sound is made, travels. Pitch and volume) | **States of matter**(Solids, Liquids, gasesChange state, Evaporation/condensation.) | **Electricity** (Simple circuits, SwitchesConductors and insulators.) | **Living things and their habitats**(Food chains – rainforests) |  |
| **Vocab** | teeth, incisor, canine, molar, premolar, tooth decay, digestive system, oesophagus, stomach, small intestine, large intestine, nutrition, acid, food chains, producers, predators, prey, herbivore, carnivore, omnivore. | sound, listen, hear, ears, noise, loud, quiet, silent, vibrations, transmit, source, sound waves, air, travel, frequency, loudness, volume, pitch, fainter, distance.  | Solids, liquids, gases, evaporation, condensationtemperature, degrees Celsius (°C), materials, measure, water cycle, cooled, heated, compressed, flow, state, matter, properties. | Electricity, appliances, electrical circuit, cells, wires, bulbs, switches, buzzers, lamp, battery, loop, switch, conductors, insulators, electrical safety. | Vertebrates, Fish, Amphibians, Reptiles, Birds, Mammals, Invertebrates, Environment, Habitats |  |
| **LKS2 Cycle B** | **Animals, including humans**(Need for right amount ofNutrition.Skeletons and muscles.) | **Light and temperature**(Need for light to see.How shadows are formed- size) | **Rocks**Group different rocks, how they are formedFossils | **Forces and magnets**(Compare different surfaces. Magnets) | **Plants** (Function - including how water is transported.Life cycle of plants.) |  |
| **Vocab** | NutritionNutrientsVitaminsMineralsCarnivoresHerbivoresOmnivoresSkeletonEndoskeletonExoskeletonHydrostaticInvertebrateVertebrateHingeJoint | light, light source, dark, darkness, reflect, reflective, shadow, direction, transparent, opaque, translucent  | Fossil, igneous, sedimentary, metamorphic, rocks, slate, chalk, limestone, texture, hard, soft, basalt, pumice, granite, fire opal, sandstone, rock salt, slate, soapstone, marble, permeable, impermeable, absorb, clay sandy,chalky soil, grains, crystals, peat, organic matter. | Force, push, pull, friction, surface, magnet, magnetic, attract, magnetic field, repel, compass, direction | leaf, leaves, flower, blossom, petal, bulb, germination, seed dispersal, seed formation, photosynthesis, stem/trunk, roots  |  |
| **UKS2 Cycle A** | **Forces**(Gravity, air/water resistance, friction. Levers, pulleys and gears.) |  | **Properties and changes of materials**(Dissolve, separating, reversible changes. Changes that produce new materials.) | **Earth and Space**(Movement Earth, planets &moon. Night and day) | **Living things and their habitats** (Animal - different life cycles, reproduction in plants and animals.) | **Animals including humans** (How humans change with age and SRE) |
| **Vocab** | force, push, pull, gravity, air resistance, water resistance, friction, Isaac Newton, newton, newton metre, weight, mass, air resistance, parachute, prediction, investigation, measure, observe, variables, results |  | material, property, magnetic, hard, transparent, flexible, permeable, thermal, conductor, insulator,variable, resistance, circuit, dissolve, soluble, insoluble, liquid, solid,solution, suspension, evaporate, filter, attract, particles,reversible, irreversible physical, chemical, reaction,  | Earth, sun, moon, planets, star, solar system, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Pluto, dwarf planets, rotate, orbit, axis, sphere, day, night, eclipse, satellite, universe, solar, sundial | Mammal, Reproduction, Insect, Amphibian, Bird, Offspring. | Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty |
| **UKS2 Cycle B** | **Electricity**(Brightness of lamp, volume ofbuzzer. symbols circuit diagrams.) | **Living things and their habitats** (Classifications including microorganisms, plants andanimals.) | **Light** (Travels in straight lines, Howlight enables us to see. Howshadows are formed – shape.) | **Evolution and inheritance** (FossilOffspring different to parents.Animal adaptation—Evolution) | **Animals including humans**(Human circulatory system.Exercise, drugs and lifestyle.) | **SRE**(Online relationships, being safe, mental wellbeing) |
| **Vocab** | circuitcircuit diagramcircuit symbolscomponentcellbattery/batteriesbuzzermotorswitch wiredim/dimmerconductorinsulatormains electricity | vertebrateanimalamphibian mammal bird reptilefish invertebrate microorganismplantoxygencharacteristics features herbivore/carnivore/omnivore classify/classification Working Scientifically Vocab Progression | light light source naturalartificialreflectreflectionrefractrefractionperiscopeprismvisible spectrumtransparenttranslucentopaqueshadow  | evolution inheritcharacteristicgenetically ancestorsadaptation organismspecies environmentfossil prehistoric organism naturalistgeology biology palaeontology | circulatory systemoxygencarbon dioxideoxygenated deoxygenatedartery/arteriesvein/veinsorgan heartatriumventricleblood vesselsrespiration breathenutrients | puberty malefemalehormonesgenitalia reproduction organs communication relationships permission pregnancyonline relationshipspersonal/private information FGM: Female Genital Mutilation |

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| KS1Working Scientifically Skills Progression | LKS2 | UKS2 |
| aimanswerschangescomparedescribedifferenceenquiryequipmentexplorefindingsgathergroupidentify (name)investigatemeasureobserve patternspictogramsquestionsrecordsamesimilaritysimple tablessorttally chartstestWhat will we do? (plan)What do you think will happen? (prediction)What happened? (results)What have we found out? (conclusion) | accurate bar chartchartclassifycomparative testconclusion (What have we found out?) criteriadatadevelopdiagram evaluate evidenceexplanation key fair testmethod observationsplan (What will we do?) practical enquiryprediction (What do you think will happen?)primary sources questioningreasoningrelationshipsresults (What happened?)secondary sourcesstandard unitstableWhat do we change, what do we keep the same, what are we measuring? | accuracy and precisionbar graphs causal relationshipdegree of trustdependent variableindependent variable justifyline graphsrefuterepeat resultsscatter graphssupportvariables (what do we change, what do we keep the same, how and what are we measuring?) |