|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **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 | waterproof  bug 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, frost  Animal names and  Hot 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 materials  Describe 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 similarities  mammals differences  birds compare  reptiles winter  fish rainfall  amphibians measure  omnivore predict  carnivore herbivore | materials  fabric  glass  metal  plastic  wood  stone  describe  waterproof  experiment  absorb  rough  dull  bendy  hard  soft  stretchy  shiny  properties | describe  properties  hard  soft  stretchy  fluffy  rigid  bendy  identify  materials  wood  plastic  fabric  metal  observe  sort  group | Plants  Seeds  Flower  Petals  Garden  Leaves  Stem  Roots  Leaves  Blossom | Plants  Seeds  Flower  Petals  Garden  Leaves  Stem  Roots  Leaves  Blossom |
| **Year 2** | **Animals including humans**  (Animals have offspring, basic  needs 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 materials  Changing 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** | Human  Animal  Offspring  Grow  Adult  Reproduce  Survival  Air  Water  Sleep  Food | Living  Dead  Never lived  Animals  Plants  Habitat  Food chain  Producer  Basic needs for survival  Suited  Adapted | hard / soft  stretchy / stiff  shiny / dull  rough / bendy  bendy / not bendy  waterproof / not waterproof  absorbent / not absorbent | habitat, micro-habitats, insects, houses, farm buildings, under bricks, damp, dark, dry, light, natural environment | Seed  Light  Water  Nutrients  Temperature  Habitat  Variable  Measure  Change  Plan  Scientific  Plants | Seed  Light  Water  Nutrients  Temperature  Habitat  Variable  Measure  Change  Plan  Scientific  Plants |
| **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, gases  Change state, Evaporation/  condensation.) | **Electricity**  (Simple circuits, Switches  Conductors 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 of  Nutrition.  Skeletons and muscles.) | **Light and temperature**  (Need for light to see.  How shadows are formed- size) | **Rocks**  Group different rocks, how they are formed  Fossils | **Forces and magnets**  (Compare different surfaces. Magnets) | **Plants**  (Function - including how water is transported.  Life cycle of plants.) |  |
| **Vocab** | Nutrition  Nutrients  Vitamins  Minerals  Carnivores  Herbivores  Omnivores  Skeleton  Endoskeleton  Exoskeleton  Hydrostatic  Invertebrate  Vertebrate  Hinge  Joint | 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 of  buzzer. symbols circuit diagrams.) | **Living things and their habitats** (Classifications including microorganisms, plants and  animals.) | **Light**  (Travels in straight lines, How  light enables us to see. How  shadows are formed – shape.) | **Evolution and inheritance**  (Fossil  Offspring different to parents.  Animal adaptation—Evolution) | **Animals including humans**  (Human circulatory system.  Exercise, drugs and lifestyle.) | **SRE**  (Online relationships, being safe, mental wellbeing) |
| **Vocab** | circuit  circuit diagram  circuit symbols  component  cell  battery/batteries  buzzer  motor  switch  wire  dim/dimmer  conductor  insulator  mains electricity | vertebrate  animal  amphibian mammal  bird  reptile  fish  invertebrate microorganism  plant  oxygen  characteristics  features  herbivore/carnivore/omnivore  classify/classification  Working Scientifically Vocab Progression | light  light source natural  artificial  reflect  reflection  refract  refraction  periscope  prism  visible spectrum  transparent  translucent  opaque  shadow | evolution  inherit  characteristic  genetically  ancestors  adaptation organism  species  environment  fossil  prehistoric organism  naturalist  geology  biology  palaeontology | circulatory system  oxygen  carbon dioxide  oxygenated  deoxygenated  artery/arteries  vein/veins  organ  heart  atrium  ventricle  blood vessels  respiration  breathe  nutrients | puberty  male  female  hormones  genitalia  reproduction  organs  communication relationships  permission pregnancy  online relationships  personal/private information  FGM: Female Genital Mutilation |

|  |  |  |
| --- | --- | --- |
| KS1  Working Scientifically Skills Progression | LKS2 | UKS2 |
| aim  answers  changes  compare  describe  difference  enquiry  equipment  explore  findings  gather  group  identify (name)  investigate  measure  observe  patterns  pictograms  questions  record  same  similarity  simple tables  sort  tally charts  test  What will we do? (plan)  What do you think will happen? (prediction)  What happened? (results)  What have we found out? (conclusion) | accurate  bar chart  chart  classify  comparative test  conclusion (What have we found out?)  criteria  data  develop  diagram  evaluate  evidence  explanation  key  fair test  method  observations  plan (What will we do?)  practical enquiry  prediction (What do you think will happen?)  primary sources  questioning  reasoning  relationships  results (What happened?)  secondary sources  standard units  table  What do we change, what do we keep the same, what are we measuring? | accuracy and precision  bar graphs  causal relationship  degree of trust  dependent variable  independent variable  justify  line graphs  refute  repeat results  scatter graphs  support  variables (what do we change, what do we keep the same, how and what are we measuring?) |