**KNOWLEDGE:**

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| **2020-2021** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year 1** | **Animals inc Humans****Knowledge**\*Name a variety of common animals:fish, amphibians, reptiles, carnivores, herbivores, omnivores etc.\*Describe and compare the structure of common animals.\*Identify, name and draw parts of the human body and say which part is associated with each sense.**Seasonal Changes****Knowledge**\*Observe changes across the 4 seasons.\*Observe and describe weather | **Animals inc Humans**Continued from Autumn 1 | **Plants****Knowledge**\*Name a variety of common plants & trees \*Identify and describe the basic structure of a variety of common flowering plants. **Seasonal Changes****Knowledge**\*Observe changes across the 4 seasons.\*Observe and describe weather | **Plants**Continued from Spring 1 | **Materials****Knowledge**\*Different materials\*Name variety of materials.\*Describe the physical property of everyday materials.\*Group materials**Seasonal Changes****Knowledge**\*Observe changes across the 4 seasons.\*Observe and describe weather | **Materials**Continued from Summer 1 |
| **Year 2** |  | **Materials****Knowledge**\*Identify and compare suitability of materials including wood, metal, plastic, glass, brick, rock, paper and cardboard.\*Squashing, bending, twisting and stretching. | **Living Things and Their Habitats****Knowledge**\*Explore the difference between living, dead & never been alive.\*Identify living things live in habitats.\*Identify and name a variety of plants and animals.\*Describe how animals obtain their food. | **Plants****Knowledge**\*Functions of different kinds of plants.\*Requirements of survival.\*How water is transported. \*Life cycle: pollination, seed formation and seed dispersal. |  | **Animals inc Humans****Knowledge**\*Notice that animals and humans have offspring which grow into adults.\*Understand the basic need of survival (water, food &air).\*Understand the importance of exercise, food types and hygiene |
| **Year 3** | **Animals inc Humans****Knowledge**Human Nutrition\*identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. | **Animals inc Humans****Knowledge**Skeletons/Muscles\* identify that humans and some other animals have skeletons and muscles for support, protection and movement. | **Magnets and Forces****Knowledge**\*Different surfaces.\*Contact between 2 forces.\*Magnets attract and repel. \*Magnetic materials.\*2 poles. | **Rocks and Fossils****Knowledge**\*Group and compare.\*Describe how fossils are formed.\*Recognise that soils are made from rocks and organic matter. | **Light****Knowledge**\*Understand that we need light to see.\*Reflection\*Dangers of sunlight.\*Shadows\*Shadow changes and patterns.  | **Plants****Knowledge**\*Functions of different kinds of plants.\*Requirements of survival.\*How water is transported. \*Life cycle: pollination, seed formation and seed dispersal. |
| **Year 4** | **Earth and Space (Year 5)** | **Living Things and Their Habitats****Knowledge**\*Group living things in a variety of ways.\*Use classification keys to group, identify and name living things in their local and wider environment.\*Understand that environments change. | **Animals inc Humans****Knowledge**\*Functions of the digestive system.\* Teeth and their functions.\*Construct and interpret a variety of food chains, identifying producers, predators and prey.. | **Sound****Knowledge**\*Identify how sounds are made.\*Vibrations travel.\*Patterns of pitch.\*Patterns between volume\*Understand that sounds get fainter due to distance. | **Electricity****Knowledge**\*Construct circuits.\*Identify whether or not a lamp will light in a circuit based on whether or not the lamp is part of a complete loop with a battery.\*Recognise that a switch opens and closes a circuit.\*Conductors and insulators. | **States of Matter****Knowledge**\*Compare and groups solids, liquids and gasses.\*Change of state (heated or cooled).\*Evaporation & condensation. |
| **Year 5** | **Earth and Space****Knowledge**\*Movement of the Earth and other planets.\*Describe the movement of the Moon relative to the Earth.\*Describe the Sun, Earth and Moon as approximately spherical bodies.\*Explain day and night and the apparent movement of the sun across the sky. | **Living Things and Their Habitats****Knowledge**\*Difference of life cycles of mammals, amphibians, an insect & a bird.\*Life process of reproduction in some plants and animals. | **Animals inc Humans****Knowledge**\*Describe the changes as humans develop to old age. | **Forces** **Knowledge**\*Understanding gravity.\*Understanding air resistance &water resistance that act between moving surfaces.\*Mechanisms, levers, pulleys and gears.  | **Properties of Materials****Knowledge**\*Grouping of materials based on their properties. \*Dissolve\*Separation\*Change of state \*Reversible changes. | **Electricity (Catch Up Year 4)** |
| **Year 6** |  | **Light****Knowledge**\*Recognise that light travels in straight lines.\*Understand that objects are seen because they give out or reflect light into the eye.\*Explain that we see things because light travels from light source to our eyes or from light source to objects and then to our eyes.\*Shadows have the same shape as the object that cast them. | **Electricity** **Knowledge**\*Understand that the voltage of cells will increase/decrease the sound of a buzzer or brightness of a lamp. \*Give reasons for variations in how components function. \*Use recognised symbols when representing a circuit in a diagram.  | **Evolution****Knowledge**\*Recognise that living things change over time.\*Understand that fossils provide information about living things.\*Recognise that living things produce offspring of the same kind.\*Identify how animals and plants are adapted to suit their environment. |  | **Living Things and their Habitats****Knowledge**\*Describe how things are classified into groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.\*Give reasons for classifying plants & animals.**Animals Including Humans****Knowledge**\*Identify and name main parts of the human circulatory system. \*Describe the functions of the heart, blood vessels and blood. \*Recognise the impact of diet, exercise, drug and lifestyle on their bodies. \*How water and nutrients are transported within animals & humans. |

**VOCABULARY:**

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| **2020-2021** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year 1** | **Animals inc Humans****Vocabulary:**Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hoovesSenses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue**Seasonal Changes****Vocabulary:**Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length | **Animals inc Humans**Continued from Autumn 1 | **Plants****Vocabulary:**Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area Names of garden and wild flowering plants in the local area**Seasonal Changes****Vocabulary:**Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length | **Plants**Continued from Spring 1 | **Materials****Vocabulary:**Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through**Seasonal Changes****Vocabulary:**Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length | **Materials**Continued from Summer 1 |
| **Year 2** |  | **Materials****Vocabulary:**Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials – as for Year 1 plus opaque, transparent and translucent, reflective, nonreflective, flexible, rigid Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching | **Living Things and Their Habitats****Vocabulary:**Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc. | **Plants****Vocabulary:**As for Year 1 plus light, shade, sun, warm, cool, water, grow, healthy |  | **Animals inc Humans****Vocabulary:**Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise, heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta) |
| **Year 3** | **Animals inc Humans****Vocabulary:**Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect, move, skull, ribs, spine | **Animals inc Humans** | **Magnets and Forces****Vocabulary:**Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole | **Rocks and Fossils****Vocabulary:**Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil | **Light****Vocabulary:**Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous | **Plants****Vocabulary:**Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal) |
| **Year 4** | **Earth and Space (Year 5)** | **Living Things and Their Habitats****Vocabulary:**Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate | **Animals inc Humans****Vocabulary:**Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor, canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain | **Sound****Vocabulary:**Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation | **Electricity****Vocabulary:**Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol | **States of Matter****Vocabulary:**Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle |
| **Year 5** | **Earth and Space****Vocabulary:**Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets | **Living Things and Their Habitats****Vocabulary:**Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings | **Animals inc Humans****Vocabulary:**Puberty – the vocabulary to describe sexual characteristics | **Forces** **Vocabulary:**Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears | **Properties of Materials****Vocabulary:**Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material | **Electricity (Catch Up Year 4)** |
| **Year 6** |  | **Light****Vocabulary:**As for Year 3 - Light, plus straight lines, light rays | **Electricity** **Vocabulary:**Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage | **Evolution****Vocabulary:**Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils |  | **Living Things and their Habitats****Vocabulary:**Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering**Animals Including Humans****Vocabulary:**Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle |