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|  | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Seasons  (physics) |  | Observe changes across the four seasons    Observe and describe weather associated with the seasons and how day length varies (temperatures during the day and night) |  |  |  |  |  |
| Animals including humans  (biology) |  | Identify and label a variety of common animals (fish, amphibians, reptiles, birds, mammals)    Know carnivores, herbivores and omnivores    How to care for pets    Identify, name, draw and label the basic parts of the human body and link to senses | Know that animals have offspring that grow to be adults    Know what animals and humans need to survive    Describe the importance for humans of exercise, eating the right number of different types of food and hygiene | Know that animals including humans need the right types and amounts of nutrition which comes from what they eat    Know that humans and some other animals have skeletons and muscles for support, protection and movement | Know the simple functions of the basic parts of the digestive system in humans    Know types and simple functions of teeth in humans    Construct and interpret food chains (identifying producers, predators and prey) | Know the changes as humans develop to old age | Know the main parts of the human circulatory system    Describe the functions of the heart, blood vessels and blood    Know the impact of diet, exercise and drugs on the body |
| Earth and Space  (physics) |  |  |  |  |  | Describe movement of the Earth and other planets, relative to the sun    Describe movement of the moon relative to the Earth    Know the relationship between the Sun, Earth and Moon (spherical bodies)    Know about the Earth’s rotation (day/night) |  |
| Electricity  (physics) |  |  |  |  | Identify common appliances    Construct a simple circuits naming basic parts    Identify common conductors and insulators    Recognise the function of a switch in a circuit |  | Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in a circuit    Compare and give reasons for how components function (brightness of bulbs, loudness of buzzers)    Know and use correct circuit symbols |
| Evolution and Inheritance  (biology) |  |  |  |  |  |  | Know that fossils provide information about living things in the past    Recognise that living things produce offspring of the same kind (normally different to parents)    Know about adaptation/ evolution    Darwin |
| Forces and Magnets  (physics) |  |  |  | Compare how things move on different surfaces (friction)    Know how magnets attract/ repel some materials (two pole +/-) and make predictions    Know that some forces need contact whereas magnetic forces can act at a distance    Compare and group magnetic/ non-magnetic materials |  | Know and explain gravity    Identify the effects of air resistance, water resistance and friction    Recognise that some mechanisms (gears, leavers, pulleys and springs) allow a smaller force to have a greater effect |  |
| Light  (physics) |  |  |  | Recognise that we need light to see and dark is the absence of light    Know that light is reflected from surfaces    Know the dangers of the sun (Protecting eyes)    Know that shadows are formed when light from a light source is blocked by a solid object and find patterns in shadow sizes |  |  | Know how light travels (straight lines)    Know that objects are seen because they give out or reflect light into the eye    Know why shadows have the same shape as the object that cast them |
| Living things and their habitats  (biology) |  |  | Explore and compare living and non-living things (including things that have never been alive)    Describe how most living things (including plants) live in habitats or micro-habitats suited to them    Know that habitats provide for the basic needs of different animals and plants (and how they depend on each other)    Use simple food chains to identify and name different sources of food |  | Recognise that living things can be grouped in a variety of ways (using classification keys)    Recognise that environments can change and can pose dangers to living things | Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird    Describe the life process of reproduction (birth, growth, development) | Classify living things according to common observable characteristics (reptiles, amphibians, mammals, insects)    Give reasons for classifying plants and animals based on specific characteristics (for example vertebrates and invertebrates) |
| Materials  (physics) |  | Identify and name a range of materials (wood, plastic, glass, metal, water and rock)    Describe physical properties of everyday materials    Classify and group according to a range of physical properties | Know the uses of different everyday materials (wood, metal, plastic, glass, rock, brick, paper, cardboard)    Classify and group materials based on their uses    Know that solid objects can be changed by squashing, bending, twisting and stretching |  | Compare and group solids, liquids and gases    Know that some materials change state (heating and cooling; no baking)    Identify the part played by evaporation and condensation in the water cycle | Compare and group everyday materials based on their properties including their hardness, solubility, transparency, conductivity (*electrical and thermal*) and response to magnets    Know and investigate through dissolving and mixing  reversible and irreversible changes    Know that some changes result in the formation of new materials    Use prior knowledge of solids, liquids and gases to know how mixtures might be separated (filtering, sieving and evaporating)    Use comparative and fair tests to give reasons for uses of everyday materials |  |
| Plants  (biology) |  | Identify and name a variety of common, wild and green plants, including deciduous and evergreen trees    Identify and describe the basic structure of a variety of common flowering plants including trees | Observe and describe how seeds and bulbs grow into mature plants    Find out and describe how plants need water, light and suitable temperature to grow and stay healthy | Identify and describe the functions of different parts of flowering plants: roots, stem/ trunk, leaves and flowers    Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant    Investigate the way in which water is transported within plants    Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal |  |  |  |
| Rocks  (chemistry) |  |  |  | Compare and group different types of rocks (appearance and simple physical properties)    Describe how rocks and fossils are formed in simple terms    Know that soils are made from rocks and organic matter |  |  |  |
| Sound  (physics) |  |  |  |  | Identify how sounds are made (Vibrations)    Find patterns between volume of a sound and the strength of the vibrations that produced it    Know how vibrations travel to the ear    Find patterns between the pitch of a sound and the object that produced it    Recognise that sounds get fainter as the distance increases |  |  |