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| **Year 4****Knowledge progression** | **Children working towards national standard…** | **Children working at national standard…** | **Children working beyond national standard…***\*(taken from UKS2 NC)* |
| **Animals, including humans** | -find out about and describe the basic needs of animals, including humans, for survival (water, food and air)-describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene-identify and name a variety of common animals that are carnivores, herbivores and omnivores-describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food | -describe the simple functions of the basic parts of the digestive system in humans-identify the different types of teeth in humans and their simple functions.-Construct and interpret a variety of food chains, identifying producers, predators and prey | -identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (including the pulse and clotting).-recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.-describe the ways in which nutrients and water are transported within animals, including humans |
| **Living things and their habitats** | -identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals -identify and name a variety of common animals that are carnivores, herbivores and omnivores-identify and name a variety of plants and animals in their habitats, including micro-habitats-identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other | -recognise that living things can be grouped in a variety of ways-explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment-recognise that environments can change constantly changing and that this can sometimes pose dangers to specific habitats | -describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals-give reasons for classifying plants and animals based on specific characteristics-identify how animals and plants are adapted to suit their environment in different ways and adaption leads to evolution |
| **States of matter** | -describe the simple physical properties of a variety of everyday materials-compare and group together a variety of everyday materials on the basis of their simple physical properties | -compare and group materials together, according to whether they are solids, liquids or gases-observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)-identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature | -use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating-demonstrate that dissolving, mixing and changes of state are reversible changes-Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution |
| **Electricity** | *-(explore battery powered toys and carry out a variety of enquires related to these).* | -identify common appliances that run on electricity-construct a simple series electrical circuit identifying and naming the basic parts of a simple electrical circuit, including cells, wires, bulbs, switches and buzzers-identify whether or not a lamp will light in a simple series 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 and associate this with whether or not a lamp lights in a simple series circuit-recognise some common conductors and insulators, and associate metals with being good conductors | -associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit-compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches-use recognised symbols when representing a simple circuit in a diagram |
| **Sound** | *( explore different ways of making and altering sounds … experiment making sounds of differing volume and pitch)* *(observe and name a variety of sources of sound, noticing that we hear with our ears)* | -identify how sounds are made, associating some of them with something vibrating-recognise that vibrations from sound travel through a medium to the ear-recognise that sounds get fainter as the distance from the sound source increases-find patterns between the pitch of a sound and features of the object that produced it-find patterns between the volume of a sound and the strength of the vibrations that produced it. | *-(linked to design technology with either children designing sound proofing for a house or ear protectors and designing and making a musical instrument )* |

\**content taken from UKS2 NC so schools should avoid teaching this in LKS2 and opt to add additional content giving breadth to the topic*