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| **Living things and their habitats**  The children will be taught:   * that living things are grouped based on common observable features, behaviours and on similarities and differences * about the classification system created by Carl Linnaeus * about the animal kingdom (vertebrates and invertebrates) and plant kingdom (flowering and non-flowering plants) * to classify and group animals and plants found in the school environment * about micro-organism (fungi, algae, bacteria and viruses) * how to interpret and construct branching keys. | **Evolution and inheritance**  The children will be taught:   * how a fossil is created and why they are found only in sedimentary rocks * how palaeontologists help us understand the past * what the terms inheritance and variation mean * that all animals and plants produce offspring of the same kind and that there are similarities and differences between them * what the terms adaptation and evolution mean * how animals or plants adapt to suit their environment * that variation and adaption can cause a species to evolve. | | **Light**  The children will be taught:   * that light travels in straight lines * to represent the direction of light using arrows * what happens to light rays in water * about the angle of incidence and reflection * that they are able to see non-luminous objects because light reflects into their eyes * how to draw diagrams to show how they see non-luminous objects * how they are able to see objects around a corner or behind them * why shadows occur * how the size and clarity of a shadow can be changed. |
| **Animals including humans**  The children will be taught:   * the order that blood circulates around the body * about the basic structure and function of the heart, arteries, veins and blood cells * about the impacts of lifestyle choices on the function of the heart * how to find out nutritional values of the food they eat and how nutrients and water are transported through the body * about helpful and harmful drugs and how they affect the body. | | **Electricity**  The children will be taught:   * about short circuits and how to stay safe when using electricity * to construct series circuits and name components used accurately * how to use circuit diagram symbols to draw circuits * how to read the voltage of a battery and what this means * how to investigate how the number of components and cells, or voltage of cells used can change the brightness of a bulb or speed of a motor. | |
| **Working scientifically. The children will have the opportunity to:**   * plan different types of scientific enquiries to answer questions * take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate * record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs * use test results to make predictions to set up further comparative and fair tests * report and present findings from enquiries, including conclusions, causal relationships and explanations in oral and written forms such as displays and other presentations * identify scientific evidence that has been used to support or refute ideas or arguments. | | | |