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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.
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| **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.
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| **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.
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