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| **Science Curriculum Coverage and Progression – Scientists and Inventors** |
| **NC**  | **Nursery**  | **Reception** | **Year 1**  | **Year 2**  | **Year 3**  | **Year 4**  | **Year 5**  | **Year 6**  |
| **Scientists and Inventors** | .   | .  | * identify and name a variety of common wild and garden plants, including deciduous and evergreen trees;
* describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets);
* identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense;
* 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;
* observe and describe weather associated with the seasons and how day length varies.
 | find out and describe how plants need water, light and a suitable temperature to grow and stay healthy;* 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 importance for humans of exercise, eating the right amounts of different types of food, and hygiene;
* identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses;
* find out about people who have developed new materials (non-statutory).
 | * 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;
* identify that humans and some other animals have skeletons and muscles for support, protection and movement;
* compare and group together different kinds of rocks on the basis of their appearance and simple physical properties;
* describe in simple terms how fossils are formed when things that have lived are trapped within rock;
* notice that light is reflected from surfaces;
* observe how magnets attract or repel each other and attract some materials and not others.
 | Pupils should be taught to:recognise that environments can change and that this can sometimes pose dangers to living things;identify the different types of teeth in humans and their simple functions;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);recognise that vibrations from sounds travel through a medium to the ear;identify common appliances that run on electricity;construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers;recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. | * describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird;
* compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets;
* use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating;
* describe the movement of the Earth, and other planets, relative to the Sun in the solar system;
* find out about the work of naturalists and animal behaviourists (non-statutory);
* describe how scientific ideas have changed over time (non-statutory).
 | * give reasons for classifying plants and animals based on specific characteristics;
* identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood;
* recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function;
* recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago;
* use recognised symbols when representing a simple circuit in a diagram.

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