

## Year 1 Science

ALL TOPICS will be taught using practical scientific methods

### Seasonal Changes

<b>Objectives</b>	<b>Notes and guidance</b>	<b>Activities/Experiments</b>
<ul style="list-style-type: none"><li>- Observe the apparent movement of the Sun during the day.</li><li>- Observe changes across the four seasons.</li><li>- Observe and describe weather associated with the seasons and how day length varies.</li></ul>	<ul style="list-style-type: none"><li>- Pupils should observe and talk about the weather, the seasons and how the Sun seems to move during the day.</li></ul>	<ul style="list-style-type: none"><li>- Pupils might work scientifically by observing and recording the apparent movement of the Sun during the day, for example a sequence of photographs or moving Teddy so he stays in the sunshine: making tables and charts about the weather and displays of what happens in the world around them, including day length, as the seasons change.</li><li>- Create a rainstorm: clear tray of water, put shaving foam on the top and then drip different amounts of blue dye on the top and looks like rain.</li></ul>

## Forces – Movement and speed

<b>Objectives</b>	<b>Notes and guidance</b>	<b>Activities/Experiments</b>
<ul style="list-style-type: none"><li>- Notice and describe how things are moving, using simple comparisons such as faster and slower.</li><li>- Compare how different things move.</li></ul>	<ul style="list-style-type: none"><li>- Pupils should observe closely some things moving. Pupils should discuss, describe and compare the movement of a variety of objects and, where appropriate, themselves, through actions such as sliding, rolling, falling, flying, walking and running. They can explore the movements through games, songs and rhymes, including work in physical education.</li></ul>	<ul style="list-style-type: none"><li>- Pupils might work scientifically by: asking questions about the movement of objects such as parachutes, toy cars and balloon rockets; comparing them, by measuring how far they go; ordering their findings and recording their observations and measurements, for example by constructing tables and charts, and drawing on their results to answer questions. (Link to Toys and vehicles – C/C History)</li></ul>

## Materials - Properties

Objectives	Notes and guidance	Activities/Experiments
<ul style="list-style-type: none"><li>- Distinguish between an object and the material from which it is made.</li><li>- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li><li>- Describe the simple physical properties of a variety of everyday materials.</li><li>- Compare and group together a variety of everyday materials on the basis of their simple physical properties.</li><li>- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li><li>- Pupils will find out about people who have developed useful materials (Dunlop and Brunel – C/C History)</li></ul>	<ul style="list-style-type: none"><li>- Pupils should explore, name and discuss everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent. Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil.</li></ul>	<ul style="list-style-type: none"><li>- Sort toys based on child's chosen criteria.</li><li>- What's the best material for a doll's house? Mr Wolf's jumper? Etc.</li><li>- Pupils might work scientifically by: performing simple tests to explore questions such as: 'What is the best material for an umbrella?...for lining a dog basket?...for curtains?...for a bookshelf?...for a gymnast's leotard?'</li></ul>

### Animals including humans - classifying

Objectives	Notes and guidance	Activities/Experiments
<ul style="list-style-type: none"><li>- Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates.</li><li>- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li><li>- Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, and including pets).</li><li>- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li></ul>	<ul style="list-style-type: none"><li>- Pupils should use the local environment throughout the year to study animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study. Pupils should become familiar with the common names of birds, fish, amphibians, reptiles, mammals and invertebrates, including pets.</li><li>- Pupils should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes.</li></ul>	<ul style="list-style-type: none"><li>- Pupils might work scientifically by: using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them; grouping animals according to what they eat, and using their senses to compare different textures, sounds and smells.</li></ul>