

## Cavendish Close Infant and Nursery School

*A rich, relevant, broad and balanced curriculum contributes to outstanding learning and achievement, significant growth in pupils' knowledge, and excellent attitudes to learning*

### Subject area: Science

End of Early Years Foundation Stage expectation	National Curriculum End of Key Stage 1 expectation
<p><b>ELG</b> - Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes</p>	<p>The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos. Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1.</p> <p>Pupils should be taught to:</p> <p><b><u>Working Scientifically</u></b></p> <ul style="list-style-type: none"><li>• ask simple questions and recognising that they can be answered in different ways</li><li>• observe closely, using simple equipment</li><li>• perform simple tests</li><li>• identify and classify [name &amp; sort]</li><li>• use their observations and ideas to suggest answers to questions</li><li>• to gather and record data to help in answering questions.</li></ul> <p><b><u>Plants</u></b></p> <ul style="list-style-type: none"><li>• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li><li>• identify and describe the basic structure of a variety of common flowering plants, including trees.</li><li>• observe and describe how seeds and bulbs grow into mature plants</li><li>• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li></ul>

### **Seasonal Changes**

- observe changes across the four seasons
- observe and describe weather associated with the seasons and how day length varies.

### **Animals, including humans**

- 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
- notice that animals, including humans, have offspring which grow into adults
- 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.

### **Living things and their habitats**

- explore and compare the differences between things that are living, dead, and things that have never been alive
- 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
- identify and name a variety of plants and animals in their habitats, including micro-habitats
- 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.

### **Everyday materials**

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- 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.

### **Uses of everyday materials**

- 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 how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

	<u>EYFS 1 (30-50 months)</u>	<u>EYFS 2 (40-60 months)</u>	<u>Year 1</u>	<u>Year 2</u>
<b>The world</b>	<ul style="list-style-type: none"> <li>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</li> <li>Can talk about some of the things they have observed such as plants, animals, natural and found objects.</li> <li>Talks about why things happen and how things work.</li> <li>Developing an understanding of growth, decay and changes over time.</li> <li>Shows care and concern for living things and the environment.</li> </ul>	<ul style="list-style-type: none"> <li>Looks closely at similarities, differences, patterns and change.</li> </ul>	<p><b><u>Working Scientifically – continuous throughout both Year Groups</u></b></p> <ul style="list-style-type: none"> <li>ask simple questions and recognising that they can be answered in different ways</li> <li>observe closely, using simple equipment</li> <li>perform simple tests</li> <li>identify and classify [name &amp; sort]</li> <li>use their observations and ideas to suggest answers to questions</li> <li>to be able to gather and record data to help in answering questions.</li> </ul>	
			<p><b><u>Plants</u></b></p> <ul style="list-style-type: none"> <li>identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>identify and describe the basic structure of a variety of common flowering plants (name the petals, stem, leaf and roots).</li> <li>Identify and describe the basic structure of trees (name the roots, trunk, branches and leaves).</li> </ul> <p><b><u>Animals, including humans</u></b></p> <ul style="list-style-type: none"> <li>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>identify, name and classify a variety of common animals that are carnivores, herbivores and omnivores</li> <li>describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</li> <li>sort living and non-living things</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</li> </ul>	<p><b><u>Living things and their habitats</u></b></p> <ul style="list-style-type: none"> <li>explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>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</li> <li>identify and name a variety of plants and animals in their habitats, including micro-habitats</li> <li>describe how animals find their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</li> </ul> <p><b><u>Plants</u></b></p> <ul style="list-style-type: none"> <li>observe and describe how seeds and bulbs grow into mature plants</li> <li>find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul>

			<p>sense.</p> <p><b><u>Everyday materials</u></b></p> <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> </ul> <p><b><u>Seasonal Changes</u></b></p> <ul style="list-style-type: none"> <li>• observe changes across the four seasons</li> <li>• observe and describe weather associated with the seasons and how day length varies.</li> </ul>	<p><b><u>Animals, including humans</u></b></p> <ul style="list-style-type: none"> <li>• notice that animals, including humans, have offspring which grow into adults</li> <li>• find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>• describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</li> </ul> <p><b><u>Uses of everyday materials</u></b></p> <ul style="list-style-type: none"> <li>• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>• find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>
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