

# Grange View C of E First School

## Science Skills Progression

	EYFS	Year 1	Year 2	Year 3	Year 4
Working scientifically	<ul style="list-style-type: none"> <li>Ask simple questions to find out more</li> <li>Observe the world around them</li> <li>Identify similarities and differences</li> </ul>	<ul style="list-style-type: none"> <li>Ask simple questions</li> <li>Perform simple tests</li> <li>Gather and record data to help in answering questions.</li> <li>Using their observations and ideas to suggest answers to their questions</li> </ul>	<ul style="list-style-type: none"> <li>Ask simple questions and recognise that they can be answered in different ways.</li> <li>Perform simple tests</li> <li>Gather and record data to help in answering questions.</li> <li>Identifying and classifying</li> <li>Using their observations and ideas to suggest answers to their questions</li> </ul>	<ul style="list-style-type: none"> <li>Ask more complex questions</li> <li>Perform tasks and record data</li> <li>Classifying</li> <li>Using their observations to find things out</li> <li>Group objects according to their properties</li> </ul>	<ul style="list-style-type: none"> <li>Ask more complex questions</li> <li>Perform tasks and record data</li> <li>Classifying</li> <li>Using their observations to find things out</li> <li>Group objects according to their properties</li> </ul>
Seasonal changes	<ul style="list-style-type: none"> <li>Observe weather during the difference seasons</li> </ul>	<ul style="list-style-type: none"> <li>Observe changes during the four seasons</li> <li>Describe the weather associated with the seasons and the day length</li> </ul>			

Plants and animals (including humans)

- Observe plants and animals
- Identify similarities and difference between plants and animals
- Talk about changes to plants overtime

- Identify and name common wild and garden plants
- Describe the basic structure of a variety of plants and trees
- Identify and name common animals including fish, amphibians, reptiles, birds and mammals
- identify and name a variety of common animals that are carnivores, herbivores and omnivores
- describe and compare the structure of a variety of common animals
- Identify, name and draw and label the basic human body and identify which part of the body is associated with each sense

- Compare differences between living, dead and thing that have never been alive
- Identify that most living things live in habitats and why it is suited to them and how it meets their needs
- Identify and name a variety of plants and animals in their habitats including microhabitats
- Describe how animals get their food from plants and other animals and have an understanding of a food chain
- Describe how seeds and bulbs grow into mature plants
- Describe how plants need water, light and heat to grow
- Know that humans and animals have offspring that grows into adults.
- Describe the basic needs of humans and animals
- Identify the importance of healthy eating and exercise

- Describe the functions of different parts of plants and flowers
- Explore the requirements of plants for life and growth and that they can vary between different plants
- Explore the part flowers play in the life cycle of flowering plants E.G pollination
- Identify that animals and humans need nutrition from food
- Identify that humans and some animals have muscles and skeleton and identify the purpose

- Recognise that living things can be grouped in a variety of ways, using classification keys to help group living things
- Recognise that environments can change and can sometimes pose dangers to living things.
- Describe the simple functions and parts of the digestive system in humans
- Identify the different types of teeth in humans and their functions
- Construct and interpret a variety of food chains identifying the producers, predators and prey.

<b>Materials</b>	<ul style="list-style-type: none"> <li>• Know similarities and differences in relation to materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and name a variety of materials including wood, plastic, glass, metal, water and rock</li> <li>• Distinguish between an object and the material it is made of</li> <li>• Describe properties of everyday materials</li> <li>• Compare and group together a variety of everyday materials by their physical properties</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and compare the suitability of wood, metal, plastic, glass, brick, rock, paper and cardboard of particular purposes</li> <li>• Identify that the shape of solid objects can be changed</li> </ul>		
<b>Rocks</b>				<ul style="list-style-type: none"> <li>• Compare and group different kinds of rocks based on appearance and properties</li> <li>• Describe how fossils are formed</li> <li>• Recognise that soils are made from rocks</li> </ul>	

<p>Light, sound and electricity</p>				<ul style="list-style-type: none"><li>• Recognise that we need light to see things and know that darkness is the absence of light</li><li>• Notice that light is reflected from surfaces</li><li>• Identify that light from the sun can be dangerous and how to protect their eyes</li><li>• Recognise that shadows are formed and how they form</li><li>• Find patterns in the way that the size of the shadows change</li></ul>	<p>Sound</p> <ul style="list-style-type: none"><li>• Identify how sounds are made including vibrations</li><li>• Recognise that vibrations from sound travel through a medium to the ear</li><li>• Find patterns between the pitch of a sound and features of the object that produced it</li><li>• Find patterns between the volume of a sound and the strength of the vibrations produced</li><li>• Identify that sounds get fainter as the distance from the sound source increases.</li></ul> <p>Electricity</p> <ul style="list-style-type: none"><li>• Identify common electrical appliances</li><li>• Complete a simple electrical circuit identifying and naming the basic parts</li><li>• Identify whether or not a lamp will light in a circuit based on if the lamp is part of the complete loop with a battery</li><li>• Recognise that a switch opens and closes a circuit</li><li>• Identify some common conductors and insulators and identify metal as being good conductors.</li></ul>
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<b>Forces and magnets</b>				<ul style="list-style-type: none"> <li>• Compare how things move on different surfaces</li> <li>• Notice that some forces need contact between two objects</li> <li>• Observe how magnets attract and repel each other and some materials</li> <li>• Compare and group together a variety of materials on whether they are attracted to a magnet</li> <li>• Describe magnets as having two poles and predict whether two magnets will attract or repel depending on which poles are facing</li> </ul>	
<b>States of matter</b>				<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Compare and group materials together based on whether they are solids, liquids and gases</li> <li>• Observe that some materials change state when heated and cooled and measure at what temperature this happens</li> <li>• Identify the part played by evaporation and condensation in the water cycle.</li> </ul>