



## Burbage C of E Infant School Science Progression Ladder 2021

### Statement of Intent

For the children to develop a natural curiosity for things around them, to provide opportunities for them to be inquisitive and to investigate. To improve the children's knowledge and understanding of the world by observing, describing and experimenting.

Science		
Reception	Year 1	Year 2
<b>Skills</b>		
<ul style="list-style-type: none"> <li>Children can explain the importance for healthy diet, and talk about ways to keep healthy.</li> <li>Children can explain the similarities and differences in living things.</li> <li>Children can explain the differences and similarities in materials and objects.</li> <li>Children can understand changes over time.</li> <li>Children can understand processes such as changing states of matter.</li> </ul>	<p><i>Plants:</i></p> <ul style="list-style-type: none"> <li>Children can identify a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>Children can identify the basic structure of a variety of common flowering plants, including trees.</li> </ul> <p><i>Animals (Including Humans):</i></p> <ul style="list-style-type: none"> <li>Children can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).</li> <li>Children can 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> <p><i>Materials:</i></p> <ul style="list-style-type: none"> <li>Children can distinguish between an object and the material from which it is made.</li> <li>Children can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>Children can compare and group together a variety of everyday materials on the basis of their simple physical properties.</li> </ul> <p><i>Seasonal Changes:</i></p> <ul style="list-style-type: none"> <li>Children can observe changes across the four seasons.</li> <li>Children can observe the weather associated with the seasons and how day length varies.</li> </ul>	<p><i>Plants:</i></p> <ul style="list-style-type: none"> <li>Children can observe and describe how seeds and bulbs grow into mature plants.</li> <li>Children can find out how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul> <p><i>Animals (Including Humans):</i></p> <ul style="list-style-type: none"> <li>Children can explore and compare the differences between things that are living, dead, and things that have never been alive.</li> <li>Children can 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.</li> </ul> <p><i>Materials:</i></p> <ul style="list-style-type: none"> <li>Children can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses.</li> <li>Children can compare how things move on different surfaces.</li> <li>Children can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul> <p><i>Living Things and Habitats:</i></p> <ul style="list-style-type: none"> <li>Children can notice that animals, including humans, have offspring which grow into adults.</li> <li>Children can find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</li> </ul>



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<b>Knowledge</b>		
<ul style="list-style-type: none"><li>• Children know what foods are healthy.</li><li>• Children know how to stay healthy (exercise).</li><li>• Children know the names of different types of animals with the topic they are learning.</li><li>• Children know how to describe what an animal looks like.</li><li>• Children know which animals are the same and why/how.</li><li>• Children know how to describe (using basic language) materials and objects.</li><li>• Children know what changes occur over time in relation to seasons.</li></ul>	<p><i>Plants:</i></p> <ul style="list-style-type: none"><li>• Children know the name of a variety of common wild and garden plants.</li><li>• Children know what deciduous and evergreen mean.</li><li>• Children know the basic structure of a plant and trees.</li></ul> <p><i>Animals (Including Humans):</i></p> <ul style="list-style-type: none"><li>• Children know all the different types of animals (mammals, fish, amphibians, reptiles, birds).</li><li>• Children know the names of animals that are carnivores, herbivores, and omnivores, and what they eat.</li><li>• Children know the names of the basic parts of the human body.</li><li>• Children know what the five different senses are needed for.</li></ul> <p><i>Materials:</i></p> <ul style="list-style-type: none"><li>• Children know the name of everyday objects (wood, plastic, fabric, glass and metal)</li><li>• Children know the simple physical features of everyday materials.</li></ul> <p><i>Seasonal Changes:</i></p> <ul style="list-style-type: none"><li>• Children know the names of the four seasons.</li><li>• Children know how to describe each season and how changes happen.</li></ul>	<p><i>Plants:</i></p> <ul style="list-style-type: none"><li>• Children know how seeds and bulbs mature into plants.</li><li>• Children know what a plant needs to stay healthy and grow.</li></ul> <p><i>Animals (Including Humans):</i></p> <ul style="list-style-type: none"><li>• Children know 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>• Children know the name of a variety of plants and animals in their habitats, including microhabitats.</li></ul> <p><i>Materials:</i></p> <ul style="list-style-type: none"><li>• Children know the names of everyday materials (wood, metal, plastic, glass, brick, rock paper and cardboard).</li><li>• Children know the properties of solid shapes.</li></ul> <p><i>Living Things and Habitats:</i></p> <ul style="list-style-type: none"><li>• Children know that animals give birth to their young.</li><li>• Children know the basic needs of an animal.</li><li>• Children know the importance of human exercise, how you should be eating the right amounts of different types of food, and hygiene.</li></ul>



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<b>Vocabulary</b>		
<p><i>Ourselves:</i> Healthy, fruit, vegetables, meat</p> <p><i>Living Things:</i> Animal, grow, live, words to describe animals (furry, scale) life cycle</p> <p><i>Materials:</i> Same, different, hard/soft, material, objects, light, dark, shadow</p> <p><i>Ice and Snow:</i> Ice, snow, frost, changes, cold, bare trees, night, day</p>	<p><i>Plants:</i> Wild plants, garden plants, weed, deciduous, evergreen, roots, stem, flowers, leaves, petals, fruit, seed, bulbs</p> <p><i>Animals (Including Humans):</i> Fish, mammal, amphibian, reptile, bird, pet, carnivore, omnivore, herbivore, arm, leg, body, neck, head, fingers, feet, toes, knee, ankle, elbow, shoulder, back, eye, ear, nose, mouth, see, hear, touch, smell, taste</p> <p><i>Materials:</i> Objects, material, heavy, soft, stretch, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, transparent, opaque</p> <p><i>Seasonal Changes:</i> Seasons, autumn, spring, summer, winter, weather, daylight</p>	<p><i>Plants:</i> Germination, spout, shoot, seed dispersal, sunlight, water, temperature, nutrition</p> <p><i>Animals (Including Humans):</i> Adult, develop, life cycle, offspring, young, dehydrate, diet, disease, energy, exercise, germs, heart rate, rate hygiene, nutrition pulse</p> <p><i>Materials:</i> Materials, suitability, properties, wood, plastic, paper, fabric, glass, metal, cardboard, bend, squash, twist, stretch</p> <p><i>Living Things and Habitats:</i> Life process, living, dead, never living, food chain, food sources, habitat, microhabitat, survive, depend</p>