

# West Denton Primary School

## Science Overview

### Long Term Plan – 2 Year Cycle

#### YEAR A

|      | Autumn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                          | Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                 | Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                |
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| EYFS | <p><i>Children experience science through EY Curriculum 'World' strand: 'Understanding the World'.</i></p> <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>They will learn about animals, including humans, by recognising body parts and exploring habitats.</p> <p>Children will identify and describe everyday materials by how they look and feel.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> |                                                                                                                                                                                                                                                          | <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>They will learn about animals, including humans, by recognising body parts and exploring habitats.</p> <p>Children will identify and describe everyday materials by how they look and feel.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> <p><b>Build on Autumn</b></p> |                                                                                                                                                                                                                                                 | <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>Plant seeds and care for growing bulbs to observe growth and decay.</p> <p>Children will learn to name animals and body parts, including humans, and begin to describe different habitats.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> <p><b>Build on Spring</b></p> |                                                                                                                                                                                                                |
| KS1  | <p><b>Seasonal Change Autumn/Winter</b></p> <p><b>Build on EYFS:</b> understand the effect of changing seasons.</p> <p>Spaced <b>retrieval</b> from EYFS: noticing seasonal weather patterns.</p> <p><b>Links to Geography and Maths</b></p>                                                                                                                                                                                                                                                                                                                                                       | <p><b>Animals, Including Humans (Y1)</b></p> <p><b>Build on EYFS:</b> name some parts of the human body.</p> <p>Spaced <b>retrieval</b> from EYFS: explore nature using their senses.</p>                                                                | <p><b>Animals, Including Humans (Y2)</b></p> <p><b>Build on Y1:</b> common vertebrates; body parts; senses.</p> <p>Spaced <b>retrieval</b> from EYFS: understand some basic hygiene.</p> <p><b>Links to Geography, Maths and English</b></p>                                                                                                                                                                                                                                                                          | <p><b>Materials Revision (Y1/Y2)</b></p> <p><b>Build on Y1:</b> objects, materials and their properties.</p> <p>Spaced <b>retrieval</b> from EYFS: talk about the differences between materials.</p>                                            | <p><b>Seasonal Change Spring/Summer</b></p> <p><b>Build on Y1:</b> observe seasons change; effect on day length.</p> <p>Spaced <b>retrieval</b> from EYFS: noticing seasonal weather patterns.</p> <p><b>Links to Geography and Maths</b></p>                                                                                                                                                                                                                                                                        | <p><b>Plants Revision (Y1/Y2)</b></p> <p><b>Build on KS1:</b> parts of a plant; common trees &amp; flowers; seeds &amp; bulbs.</p> <p>Spaced <b>retrieval</b> from EYFS: plant seeds &amp; observe growth.</p> |
| LKS2 | <p><b>Biology Revision (Y3/Y4)</b></p> <p><b>Build on Y3/4:</b> muscles &amp; skeletons; digestion; teeth; classification.</p> <p>Spaced <b>retrieval</b> from KS1: parts of a plant; common vertebrates; habitats; life cycles.</p>                                                                                                                                                                                                                                                                                                                                                               | <p><b>Forces (Y3)</b></p> <p><b>Build on Y2:</b> physical properties of materials.</p> <p>Spaced <b>retrieval</b> from KS1: objects, materials &amp; their properties.</p> <p><b>Links to Maths</b></p>                                                  | <p><b>Light (Y3)</b></p> <p><b>Build on Y1:</b> seasonal change; sun safety; day length.</p> <p>Spaced <b>retrieval</b> from EYFS: understand effects of the changing seasons.</p>                                                                                                                                                                                                                                                                                                                                    | <p><b>States of Matter</b></p> <p><b>Build on Y3:</b> rocks and rock cycle.</p> <p>Spaced <b>retrieval</b> from KS1: objects, materials &amp; their properties.</p>                                                                             | <p><b>Sound</b></p> <p><b>Build on KS1:</b> parts of the body; the human senses (hearing).</p> <p>Spaced <b>retrieval</b> from EYFS: using senses to explore the world around us.</p> <p><b>Links to Maths</b></p>                                                                                                                                                                                                                                                                                                   | <p><b>Electricity (Y4)</b></p> <p><b>Build on LKS2:</b> types of energy (magnetism); states of matter (particles).</p> <p>Spaced <b>retrieval</b> from EYFS: exploring common household items.</p>             |
| UKS2 | <p><b>Living Things and their Habitats (Y5)</b></p> <p><b>Build on Y4:</b> group living things; environments.</p> <p>Spaced <b>retrieval</b> from KS1: living, once-living, never alive.</p> <p><b>Links to Maths</b></p>                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Living Things and their Habitats (Y6)</b></p> <p><b>Build on Y5:</b> life cycle of plants; oviparous; a/sexual reproduction.</p> <p>Spaced <b>retrieval</b> from LKS2: parts of a plant; living things; habitats.</p> <p><b>Links to Maths</b></p> | <p><b>Animals, Including Humans (Y5)</b></p> <p><b>Build on Y4:</b> food chains; teeth; digestive system.</p> <p>Spaced <b>retrieval</b> from LKS2: parts of the body; common vertebrates.</p> <p><b>Links to Maths and PSHE</b></p>                                                                                                                                                                                                                                                                                  | <p><b>Animals, Including Humans (Y6)</b></p> <p><b>Build on Y5:</b> human life cycle; puberty.</p> <p>Spaced <b>retrieval</b> from LKS2: skeletons and muscles; digestive system; food chains.</p> <p><b>Links to Maths, PE and English</b></p> | <p><b>Forces (Y5)</b></p> <p><b>Build on Y3:</b> friction; pushes and pulls; magnetism.</p> <p>Spaced <b>retrieval</b> from KS1: physical properties of materials.</p>                                                                                                                                                                                                                                                                                                                                               | <p><b>Electricity (Y6)</b></p> <p><b>Build on Y4:</b> parts of a circuit; components; electricity.</p> <p>Spaced <b>retrieval</b> from LKS2: types of energy (magnetism); states of matter (particles).</p>    |

# West Denton Primary School

## Science Overview

### YEAR B

|      | Autumn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                               | Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                            | Summer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                             |
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| EYFS | <p><i>Children experience science through EY Curriculum 'World' strand: 'Understanding the World.'</i></p> <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>They will learn about animals, including humans, by recognising body parts and exploring habitats.</p> <p>Children will identify and describe everyday materials by how they look and feel.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> |                                                                                                                                                                                                               | <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>They will learn about animals, including humans, by recognising body parts and exploring habitats.</p> <p>Children will identify and describe everyday materials by how they look and feel.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> <p><b>Build on Autumn</b></p> |                                                                                                                                                                                                                                                                            | <p>Children will explore the world around them through observing seasonal changes, plants, animals, and how things work.</p> <p>Plant seeds and care for growing bulbs to observe growth and decay.</p> <p>Children will learn to name animals and body parts, including humans, and begin to describe different habitats.</p> <p>Through play and practical activities, children will explore simple forces such as pushes and pulls, magnets, elastic, and floating and sinking.</p> <p><b>Build on Spring</b></p> |                                                                                                                                                                                                                                             |
| KS1  | <p><b>Everyday Materials (Y1)</b></p> <p><b>Build on EYFS:</b> explore materials with similar/different properties.</p> <p>Spaced <b>retrieval</b> from EYFS: use all the senses to explore natural materials.</p>                                                                                                                                                                                                                                                                                                                                                                                 | <p><b>Uses of Materials (Y2)</b></p> <p><b>Build on Y1:</b> objects, materials and their properties.</p> <p>Spaced <b>retrieval</b> from EYFS: talk about the differences between materials.</p>              | <p><b>Plants (Y1)</b></p> <p><b>Build on EYFS:</b> plant seeds &amp; bulbs and observe growth.</p> <p>Spaced <b>retrieval</b> from EYFS: observe effect of the changing seasons on the natural world.</p> <p><b>Links to Maths</b></p>                                                                                                                                                                                                                                                                                | <p><b>Plants (Y2)</b></p> <p><b>Build on Y1:</b> parts of a plant; name common trees &amp; flowers.</p> <p>Spaced <b>retrieval</b> from EYFS: plant seeds &amp; observe growth.</p> <p><b>Links to Maths</b></p>                                                           | <p><b>Animals Revision (Y1/Y2)</b></p> <p><b>Build on Y1/2:</b> senses; common vertebrates; body parts; life cycles.</p> <p>Spaced <b>retrieval</b> from EYFS: understand basic body parts &amp; hygiene.</p>                                                                                                                                                                                                                                                                                                        | <p><b>Living Things and their Habitats (Y2)</b></p> <p><b>Build on Y1/2:</b> animals and plants; seasons.</p> <p>Spaced <b>retrieval</b> from EYFS: explore natural environments.</p> <p><b>Links to Maths</b></p>                          |
| LKS2 | <p><b>Animals, Including Humans (Y3)</b></p> <p><b>Build on Y2:</b> offspring; healthy diet; exercise.</p> <p>Spaced <b>retrieval</b> from EYFS: understand some basic hygiene.</p> <p><b>Links to Maths and PSHE</b></p>                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Animals, Including Humans (Y4)</b></p> <p><b>Build on Y3:</b> muscles &amp; skeleton; healthy diet.</p> <p>Spaced <b>retrieval</b> from KS1: carnivores and herbivores.</p> <p><b>Links to PSHE</b></p> | <p><b>Living Things and their Habitats (Y4)</b></p> <p><b>Build on Y2:</b> living, once living &amp; never alive; habitats &amp; environments; common vertebrates and invertebrates.</p> <p>Spaced <b>retrieval</b> from EYFS: recognising the difference between natural &amp; human-made environments and some of the animals &amp; plants in them.</p>                                                                                                                                                             |                                                                                                                                                                                                                                                                            | <p><b>Plants (Y3)</b></p> <p><b>Build on Y2:</b> seeds &amp; bulbs; germination; some survival needs.</p> <p>Spaced <b>retrieval</b> from KS1: parts of a plant; common flowers and trees.</p>                                                                                                                                                                                                                                                                                                                       | <p><b>Rocks</b></p> <p><b>Build on KS1:</b> objects, materials &amp; their properties; physical properties (Y2).</p> <p>Spaced <b>retrieval</b> from EYFS: explore natural &amp; human-made materials.</p> <p><b>Links to Geography</b></p> |
| UKS2 | <p><b>Biology Revision (Y5/Y6)</b></p> <p><b>Build on Y5/6:</b> characteristics, classification &amp; environments; a/sexual reproduction in animals and plants; human life cycle &amp; puberty; cardiovascular system; composition of blood; effect of drugs and exercise on the body.</p> <p>Spaced <b>retrieval</b> from LKS2: muscles &amp; skeletons; digestive system; teeth; diets of animals; common in/vertebrates; food chains.</p> <p><b>Links to Maths and PSHE</b></p>                                                                                                                |                                                                                                                                                                                                               | <p><b>Evolution</b></p> <p><b>Build on UKS2 Biology (as left).</b></p> <p>Spaced <b>retrieval</b> from LKS2 Biology (as left).</p> <p><b>Links to RE</b></p>                                                                                                                                                                                                                                                                                                                                                          | <p><b>Earth &amp; Space</b></p> <p><b>Build on Y5:</b> balanced forces; gravity.</p> <p>Spaced <b>retrieval</b> from LKS2: light sources; shadows; seasonal change; day length; inability of sound to travel in a vacuum.</p> <p><b>Links to Geography and English</b></p> | <p><b>Properties &amp; Changes of Materials (Y5)</b></p> <p><b>Build on Y4:</b> changing states of matter; conductivity.</p> <p>Spaced <b>retrieval</b> from LKS2: properties (inc. physical) of materials.</p>                                                                                                                                                                                                                                                                                                      | <p><b>Light (Y6)</b></p> <p><b>Build on Y3:</b> light &amp; dark; light sources; reflections; shadows.</p> <p>Spaced <b>retrieval</b> from KS1: seasonal change; sun safety; day length.</p>                                                |