

Eaton Primary School

National Curriculum Mapping

Science

National Curriculum Mapping

How this document works:

This is a whole school overview, demonstrating where the Working Scientifically objectives, laid out in the National Curriculum, are covered.

<u>EYFS</u>

This table demonstrates how each unit of work links to the Early Learning Goals and the Development Matters 2021 statements.

<u>Year 1 to 6</u>

These tables identify the Working Scientifically National Curriculum objectives for each year group and how they are mapped to each unit taught.

<u>EYFS</u>

| Early Years Foundation Stage | Early years outcomes: Prime Areas | Early years outcomes: Specific Areas |
|------------------------------|---|--|
| (Reception) | Development Matters 2021 statements | Development Matters 2021 statements |
| | Early Learning Goals | Early Learning Goals |
| Unit of Work | | |
| | Personal, Social and Emotional Development | |
| | ELG: Managing Self: Manage their own basic hygiene and | |
| | personal needs, including dressing, going to the toilet and | |
| | understanding the importance of healthy food choices. | |
| Keeping Healthy | Development Matters: | |
| | Manage their own needs | |
| | Personal hygiene | |
| | • Know and talk about the different factors that support | |
| | their overall health and wellbeing: | |
| | regular physical activity | |
| | healthy eating | |
| | toothbrushing | |
| | sensible amounts of 'screen time' | |
| | having a good sleep routine | |
| | Communication and Language | Understanding the World |
| | ELG: Speaking : Participate in small group, class and one-to-one | ELG: The Natural World: Explore the natural world around |
| | discussions, offering their own ideas, using recently introduced vocabulary | them, making observations and drawing pictures |
| | | Development Matters: |
| Colour | Development Matters: | Describe what they see, hear and feel whilst |
| | Learn new vocabulary | outside. |
| | Ask questions to find out more and to check they | • Explore the natural world around them Expressive |
| | understand what has been said to them | Arts and Design |
| | Articulate their ideas and thoughts in well-formed | |
| | sentences | ELG: Creating with Materials: Safely use and explore a |
| | | variety of materials, tools and techniques, experimenting |
| | | with colour, design, texture, form and function |
| | | |

| | Personal, Social and Emotional Development | Understanding the World |
|---------------|--|--|
| | | Development Matters: Explore the natural world around them Recognise some environments that are different from the one in which they live |
| | | differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. |
| | Development Matters: Learn new vocabulary Ask questions to find out more and to check they understand what has been said to them | ELG: The Natural World : Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter ELG: The Natural World : Know some similarities and |
| Under the Sea | Communication and Language ELG: Speaking : Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary | Understanding the World ELG: The Natural World: Explore the natural world around them, making observations and drawing pictures of animals and plants |
| | | Development Matters: Understand the effect of changing seasons on the natural world around them |
| Celebrations | Development Matters: Learn new vocabulary Ask questions to find out more and to check they understand what has been said to them | ELG: The Natural World : Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter |
| | ELG: Speaking : Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary | ELG: The Natural World : Explore the natural world around them, making observations and drawing pictures of animals and plants |
| | Communication and Language | to express their ideas and feelings. Understanding the World |
| | they might happen. | • Explore, use and refine a variety of artistic effects |
| | Use talk to help work out problems and organise thinking and activities, and to explain how things work and why | Development Matters: |

| | ELG: Managing Self : Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. | ELG: The Natural World : Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter |
|--------------------|--|--|
| People Who Help Us | Development Matters Manage their own needs Personal hygiene Know and talk about the different factors that support their overall health and wellbeing regular physical activity healthy eating toothbrushing sensible amounts of 'screen time' having a good sleep routine | Development Matters Explore the natural world around them ELG: Past and Present: Talk about the lives of the people around them and their roles in society Development Matters: Name and describe people who are familiar to them |
| | Personal, Social and Emotional Development | Understanding the World |
| All About Me | ELG: Building Relationships: Work and play cooperatively and take turns with others. Development Matters: Build constructive and respectful relationships | ELG: The Natural World: Explore the natural world around them, making observations and drawing pictures of animals and plants ELG: The Natural World: Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. Development Matters: Explore the natural world around them Recognise some environments that are different |
| | | from the one in which they live |
| Traditional Tales | Communication and Language ELG: Speaking: Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate Development Matters: Use new vocabulary in different contexts Engage in story times | Understanding the World ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter ELG: The Natural World: Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. |

| | | Development Matters: Explore the natural world around them Recognise some environments that are different from the one in which they live |
|------------------------|---|---|
| | Communication and Language | Understanding the World |
| | ELG: Listening, Attention and Understanding : Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions | ELG: The Natural World : Explore the natural world around them, making observations and drawing pictures of animals and plants |
| Animals | Development Matters: Engage in non-fiction books Listen to and talk about selected non-fiction to develop a deep familiarity with new knowledge and vocabulary. | ELG: The Natural World : Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class |
| | Physical Development ELG: Gross Motor Skills: Move energetically, such as running, jumping, dancing, hopping, skipping and climbing | ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter |
| | Development Matters: Revise and refine the fundamental movement skills they have already acquired: • rolling • crawling • walking • jumping • running • hopping • skipping • climbing Progress towards a more fluent style of moving, with developing control and grace | Development Matters: Explore the natural world around them Recognise some environments that are different from the one in which they live Understand the effect of changing seasons on the natural world around them |
| | Communication and Language | Understanding the World |
| | ELG: Speaking : Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary | ELG: The Natural World : Explore the natural world around them, making observations and drawing pictures of animals and plants |
| Minibeasts and Growing | Development Matters: Learn new vocabulary Ask questions to find out more and to check they understand what has been said to them | ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter |
| | | Development Matters: |

| Seasons | | Understanding the World |
|-----------|---|---|
| | ELG: Speaking : Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary | ELG: Creating with Materials: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function; |
| | Communication and Language | Expressive Arts and Design |
| Materials | discussions, offering their own ideas, using recently introduced vocabulary Development Matters: Learn new vocabulary Ask questions to find out more and to check they understand what has been said to them | variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function; Make use of props and materials when role playing characters in narratives and stories. Development Matters: Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/o different properties Talk about the differences between materials and changes they notice. |
| | Communication and Language ELG: Speaking : Participate in small group, class and one-to-one | Expressive Arts and Design ELG: Creating with Materials: Safely use and explore a |
| | | Development Matters: Explore, use and refine a variety of artistic effects to express their ideas and feelings. |
| | | ELG: Creating with Materials : Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function |
| | | Understand the effect of changing seasons on the natural world around them Explore the natural world around them Expressive Arts and Design |

| | ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter |
|--|--|
| | |

Year 1: Working Scientifically

| National Curriculum Objectives | Animals Including Humans | Materials | Plants | Seasonal Changes |
|---|--------------------------|--------------|--------------|------------------|
| Asking simple questions and recognising that they can be answered in different ways | \checkmark | \checkmark | \checkmark | \checkmark |
| Observing closely, using simple equipment | \checkmark | \checkmark | \checkmark | \checkmark |
| Performing simple tests | \checkmark | \checkmark | \checkmark | \checkmark |
| Identifying and classifying | \checkmark | \checkmark | \checkmark | \checkmark |
| Using their observations and ideas to suggest answers to questions | \checkmark | \checkmark | \checkmark | \checkmark |
| Gathering and recording data to help in answering questions. | \checkmark | \checkmark | \checkmark | \checkmark |

Year 2: Working Scientifically

| National Curriculum Objectives | Animals including Humans | Living Things and their Habitats | Materials | Plants |
|---|--------------------------|-------------------------------------|--------------|--------------|
| Asking simple questions and recognising that they can be answered in different ways | \checkmark | \checkmark | | \checkmark |
| Observing closely, using simple equipment | | | \checkmark | \checkmark |
| Performing simple tests | \checkmark | | \checkmark | \checkmark |
| Identifying and classifying | \checkmark | √ | \checkmark | \checkmark |
| Jsing their observations and ideas to suggest answers to questions | | √ | \checkmark | \checkmark |

| Gathering and recording data to help in answering questions. | \checkmark | \checkmark | \checkmark | \checkmark |
|--|--------------|--------------|--------------|--------------|
|--|--------------|--------------|--------------|--------------|

Year 3: Working Scientifically

| National Curriculum Objectives | Rocks | Animals including Humans | Forces and magnets | Light | Plants |
|--|--------------|-----------------------------|--------------------|--------------|--------|
| Asking relevant questions and using different types of scientific enquiries to answer them | \checkmark | √ | | \checkmark | |
| Setting up simple practical enquiries, comparative and fair tests | \checkmark | | \checkmark | \checkmark | ✓ |
| Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers | \checkmark | \checkmark | \checkmark | \checkmark | √ |
| Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions | \checkmark | \checkmark | \checkmark | | √ |
| Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables | \checkmark | \checkmark | \checkmark | \checkmark | √ |
| Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions | √ | √ | ✓ | \checkmark | √ |

| Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
|---|--------------|--------------|--------------|--------------|--------------|
| Identifying differences, similarities or changes related to simple scientific ideas and processes | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
| Using straightforward scientific evidence to answer questions or to support their findings. | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

Year 4: Working Scientifically

| National Curriculum Objectives | Living Things and their Habitats | Animals including Humans | Sound | Electricity | States of Matter |
|--|-------------------------------------|-----------------------------|--------------|--------------|------------------|
| Asking relevant questions and using different types of scientific enquiries to answer them | \checkmark | √ | | √ | |
| Setting up simple practical enquiries, comparative and fair tests | | \checkmark | \checkmark | | √ |
| Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers | \checkmark | \checkmark | \checkmark | | ✓ |
| Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions | \checkmark | \checkmark | | \checkmark | √ |

| Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |
|---|--------------|--------------|--------------|--------------|--------------|
| Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions | \checkmark | √ | √ | \checkmark | \checkmark |
| Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions | | √ | √ | \checkmark | |
| Identifying differences, similarities or changes related to simple scientific ideas and processes | \checkmark | √ | √ | \checkmark | \checkmark |
| Using straightforward scientific evidence to answer questions or to support their findings. | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

Year 5: Working Scientifically

| National Curriculum Objectives | Living Thigs and their Habitats | Animals including Humans | Space | Properties of Materials | Forces |
|---|------------------------------------|-----------------------------|--------------|-------------------------|--------------|
| Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary | \checkmark | | \checkmark | \checkmark | \checkmark |
| Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate | | \checkmark | \checkmark | \checkmark | \checkmark |
| Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs | \checkmark | \checkmark | \checkmark | √ | \checkmark |

| Using test results to make predictions to set up further comparative and fair tests | | | | | \checkmark |
|---|--------------|---|--------------|--------------|--------------|
| Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations | \checkmark | | \checkmark | \checkmark | \checkmark |
| Identifying scientific evidence that has been used to support or refute ideas or arguments. | \checkmark | √ | | | \checkmark |

Year 6: Working Scientifically

| National Curriculum Objectives | Animals including Humans | Electricity | Living Things and their Habitats | Light | Evolution and Inheritance |
|---|-----------------------------|--------------|-------------------------------------|--------------|------------------------------|
| Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary | \checkmark | \checkmark | ✓ | | √ |
| Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate | \checkmark | \checkmark | \checkmark | \checkmark | |
| Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs | \checkmark | \checkmark | \checkmark | \checkmark | √ |
| Using test results to make predictions to set up further comparative and fair tests | | | \checkmark | | |
| Reporting and presenting findings from enquiries, including conclusions, causal | \checkmark | \checkmark | | \checkmark | \checkmark |

| relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations | | | | |
|--|--|--------------|--------------|--------------|
| Identifying scientific evidence that has been used to support or refute ideas or arguments. | | \checkmark | \checkmark | \checkmark |