

Science Skills Progression – EYFS & Key Stage 1



Skills	EYFS Implementation	Year 1 Implementation	Year 2 Implementation	Impact
Asking Questions	<p>Children are fascinated about our world and ask lots of questions.</p> <p>Wombles Of Windmills</p> <ul style="list-style-type: none"> How can we make our local environment better? <p>Make A Difference</p> <ul style="list-style-type: none"> How could we improve our school grounds to make them more eco-friendly? <p>Outer Space</p> <ul style="list-style-type: none"> How do rockets fly? <p>Seasonal Changes</p> <ul style="list-style-type: none"> Why does it look different outside in Spring? <p>Wombles Of Windmills</p> <ul style="list-style-type: none"> How can we keep plants alive? <p>Natural World</p> <ul style="list-style-type: none"> What are the best building materials? What is the life cycle of a butterfly? 	<p>Children ask questions that are beginning to be logical and scientific.</p> <p>Seasonal Changes</p> <ul style="list-style-type: none"> What are the changes we can see across the four seasons? <p>Everyday Materials</p> <ul style="list-style-type: none"> Can we name different materials? What are the physical properties of those materials? Can we group materials based on their properties? <p>Plants</p> <ul style="list-style-type: none"> Can we identify plant types? <p>Animals Including Humans</p> <ul style="list-style-type: none"> What are the parts of the human body? 	<p>Children are asking scientific questions with adult support.</p> <p>Uses Of Everyday Materials</p> <ul style="list-style-type: none"> What materials might work best for different uses? <p>Scientists & Inventors</p> <ul style="list-style-type: none"> What discoveries have famous scientists such as Louis Pasteur made? <p>Living Things & Their Habitats</p> <ul style="list-style-type: none"> How do habitats provide for the needs of living things? <p>Animals Including Humans</p> <ul style="list-style-type: none"> What do we need to survive? <p>Plants</p> <ul style="list-style-type: none"> How do seeds and bulbs grow into plants? How much light and water do plants need? 	<p>Our very small children start their journey into scientific thinking by asking questions about the world.</p> <p>Children are fascinated with everything scientific.</p> <p>Children enter Key Stage 2 with all their fascination and awe in place, so that they are excited about Science, but also able to ask appropriate questions that a scientist might be able to answer.</p>

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Making Predictions	<p>Children suggest how scientific enquiries might result, even if those suggestions are unrealistic.</p> <ul style="list-style-type: none"> • Wombles Of Windmills <ul style="list-style-type: none"> • How do we make our environment better enquiry. • Outer Space <ul style="list-style-type: none"> • How do rockets fly enquiry. • Spring Changes <ul style="list-style-type: none"> • Why does it look different outside in Spring enquiry. • World Of Wombles <ul style="list-style-type: none"> • How can we keep our plants alive enquiry. • Natural World <ul style="list-style-type: none"> • What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Children are starting to make predictions about what might happen during a scientific enquiry.</p> <ul style="list-style-type: none"> • Seasonal Changes <ul style="list-style-type: none"> • What are the changes we can see across the four seasons enquiry. • Everyday Materials <ul style="list-style-type: none"> • What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants <ul style="list-style-type: none"> • Can we identify different plant types enquiry. • Animals Including Humans <ul style="list-style-type: none"> • What are the basic parts of the human body enquiry. 	<p>With adult support, children are making sensible suggestions about what might happen during a scientific enquiry.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials <ul style="list-style-type: none"> • Can we find the best materials for different uses enquiry. • Scientists & Inventors <ul style="list-style-type: none"> • Why do we need to wash our hands enquiry. • Living Things & Their Habitats <ul style="list-style-type: none"> • What is the best habitat for a specific animal enquiry. • Animals Including Humans <ul style="list-style-type: none"> • Why do we need to exercise enquiry. • Plants <ul style="list-style-type: none"> • What conditions do plants need to survive enquiry. 	<p>Children are enthusiastic to express their ideas about scientific enquiries. If those results are different from their initial ideas, children are able to be resilient and adjust their scientific thinking.</p>

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Setting Up Tasks	<p>Children are guided towards how a scientific enquiry will be set up.</p> <ul style="list-style-type: none"> • Wombles Of Windmills How do we make our environment better enquiry. • Outer Space How do rockets fly enquiry. • Spring Changes Why does it look different outside in Spring enquiry. • World Of Wombles How can we keep our plants alive enquiry. • Natural World What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Children are starting to suggest ways to set up a scientific enquiry, even if those ideas are not fully practical.</p> <ul style="list-style-type: none"> • Seasonal Changes What are the changes we can see across the four seasons enquiry. • Everyday Materials What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants Can we identify different plant types enquiry. • Animals Including Humans What are the basic parts of the human body enquiry. 	<p>Children are starting to suggest more realistic ways to set up a scientific enquiry.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials Can we find the best materials for different uses enquiry. • Scientists & Inventors Why do we need to wash our hands enquiry. • Living Things & Their Habitats What is the best habitat for a specific animal enquiry. • Animals Including Humans Why do we need to exercise enquiry. • Plants What conditions do plants need to survive enquiry. 	<p>Children begin Key Stage 2 with realistic ideas about how to set up a scientific enquiry.</p>

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Observing & Measuring	<p>Children are excited to observe what happens during a scientific enquiry and are guided towards how their observations can be measured.</p> <ul style="list-style-type: none"> • Wombles Of Windmills • How do we make our environment better enquiry. • Outer Space • How do rockets fly enquiry. • Spring Changes • Why does it look different outside in Spring enquiry. • World Of Wombles • How can we keep our plants alive enquiry. • Natural World • What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Children are starting to suggest how they might measure the variables during a scientific enquiry.</p> <ul style="list-style-type: none"> • Seasonal Changes • What are the changes we can see across the four seasons enquiry. • Everyday Materials • What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants • Can we identify different plant types enquiry. • Animals Including Humans • What are the basic parts of the human body enquiry. 	<p>Children can suggest practical ways the variables in their scientific enquiry might be measured. Children are starting to make more independent observations during scientific enquiries.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials • Can we find the best materials for different uses enquiry. • Scientists & Inventors • Why do we need to wash our hands enquiry. • Living Things & Their Habitats • What is the best habitat for a specific animal enquiry. • Animals Including Humans • Why do we need to exercise enquiry. • Plants • What conditions do plants need to survive enquiry. 	<p>Over the course of Key Stage 1, children have the opportunity to make lots of observations during scientific enquiries.</p> <p>By the time children enter Key Stage 2, children are able to suggest practical ways they might measure their observations.</p>

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Recording Data	<p>With full adult support, children record their findings from scientific enquiries.</p> <ul style="list-style-type: none"> • Wombles Of Windmills • How do we make our environment better enquiry. • Outer Space • How do rockets fly enquiry. • Spring Changes • Why does it look different outside in Spring enquiry. • World Of Wombles • How can we keep our plants alive enquiry. • Natural World • What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Children remain fully supported by adults to record their data, however they also make some suggestions about how it might be recorded.</p> <ul style="list-style-type: none"> • Seasonal Changes • What are the changes we can see across the four seasons enquiry. • Everyday Materials • What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants • Can we identify different plant types enquiry. • Animals Including Humans • What are the basic parts of the human body enquiry. 	<p>Children are guided towards how they can record their data, but are starting to work more independently in terms of choosing the format from some teacher made models.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials • Can we find the best materials for different uses enquiry. • Scientists & Inventors • Why do we need to wash our hands enquiry. • Living Things & Their Habitats • What is the best habitat for a specific animal enquiry. • Animals Including Humans • Why do we need to exercise enquiry. • Plants • What conditions do plants need to survive enquiry. 	<p>When children begin Key Stage 2, they have confidence in how to record scientific data when given scaffolding and models.</p>

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Interpreting & Communicating Results	<p>Teachers fully facilitate children’s understanding of the results of scientific enquiries. Children work with adult support as a class or in small groups to present their work in an appropriate format.</p> <ul style="list-style-type: none"> • Wombles Of Windmills <ul style="list-style-type: none"> • How do we make our environment better enquiry. • Outer Space <ul style="list-style-type: none"> • How do rockets fly enquiry. • Spring Changes <ul style="list-style-type: none"> • Why does it look different outside in Spring enquiry. • World Of Wombles <ul style="list-style-type: none"> • How can we keep our plants alive enquiry. • Natural World <ul style="list-style-type: none"> • What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Children remain fully supported by adults to understand their data, however they also make some suggestions about what might have happened during the scientific enquiry. Teachers fully scaffold how results can be communicated.</p> <ul style="list-style-type: none"> • Seasonal Changes <ul style="list-style-type: none"> • What are the changes we can see across the four seasons enquiry. • Everyday Materials <ul style="list-style-type: none"> • What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants <ul style="list-style-type: none"> • Can we identify different plant types enquiry. • Animals Including Humans <ul style="list-style-type: none"> • What are the basic parts of the human body enquiry. 	<p>Children are guided towards an understanding of what they have observed during scientific enquiries. Children are starting to make sensible suggestions about their results. Children are starting to suggest ways in which their results can be communicated, but follow teacher models on the whole.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials <ul style="list-style-type: none"> • Can we find the best materials for different uses enquiry. • Scientists & Inventors <ul style="list-style-type: none"> • Why do we need to wash our hands enquiry. • Living Things & Their Habitats <ul style="list-style-type: none"> • What is the best habitat for a specific animal enquiry. • Animals Including Humans <ul style="list-style-type: none"> • Why do we need to exercise enquiry. • Plants <ul style="list-style-type: none"> • What conditions do plants need to survive enquiry. 	<p>Children have an understanding of the scientific principles they have investigated, mainly through teacher guidance.</p> <p>By the end of Key Stage 1, children are beginning to make sensible suggestions about the results of their scientific enquiries.</p> <p>Children begin Key Stage 2 with an understanding of how they can communicate the results of their scientific enquiries.</p>

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Evaluating	<p>Teachers guide children through a process of deciding what went well during a scientific enquiry and how it could be made better next time.</p> <ul style="list-style-type: none"> • Wombles Of Windmills • How do we make our environment better enquiry. • Outer Space • How do rockets fly enquiry. • Spring Changes • Why does it look different outside in Spring enquiry. • World Of Wombles • How can we keep our plants alive enquiry. • Natural World • What are the best building materials enquiry. • What is the life cycle of a butterfly enquiry. 	<p>Teachers guide children through a process of deciding what went well and how the scientific enquiry can be improved, but children are starting to make some appropriate suggestions.</p> <ul style="list-style-type: none"> • Seasonal Changes • What are the changes we can see across the four seasons enquiry. • Everyday Materials • What are the physical properties of different materials enquiry. • Can we group materials based on their properties enquiry. • Plants • Can we identify different plant types enquiry. • Animals Including Humans • What are the basic parts of the human body enquiry. 	<p>With adult support, children reflect on what went well during a scientific enquiry and how it can be improved next time.</p> <ul style="list-style-type: none"> • Uses Of Everyday Materials • Can we find the best materials for different uses enquiry. • Scientists & Inventors • Why do we need to wash our hands enquiry. • Living Things & Their Habitats • What is the best habitat for a specific animal enquiry. • Animals Including Humans • Why do we need to exercise enquiry. • Plants • What conditions do plants need to survive enquiry. 	<p>Children are starting to understand how to reflect on their own scientific work.</p> <p>With adult support, children are beginning to be able to suggest ways in which their scientific process can be improved.</p>