

The Fairfield Scientist YR-Y6: Subject Leader Overview

Make Observations

Ask Questions

Gather Data

Perform Tests

Use Equipment

Analyse Data

Year Group	Standardised Objectives
Year R	<p>ELG The Natural World</p> <ul style="list-style-type: none"> • Explore the natural world around them, making observations and drawing pictures of animals and plants • 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 • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <p>ELG Listening, attention and understanding</p> <ul style="list-style-type: none"> • 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 • Make comments about what they have heard and ask questions to clarify their understanding <p>ELG Speaking</p> <ul style="list-style-type: none"> • Offer explanations for why things might happen, making use of recently introduced vocabulary <p>ELG Self Regulation</p> <ul style="list-style-type: none"> • Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate <p>ELG The Natural World</p> <ul style="list-style-type: none"> • Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter <p>ELG The Natural World</p> <ul style="list-style-type: none"> • Explore the natural world around them, making observations and drawing pictures of animals and plants
Year 1	<ul style="list-style-type: none"> • Start to observe closely • Start to ask and suggest answers to simple scientific questions • Use first-hand practical experiences to find answers • Begin to gather and record data simply using words and pictures • Perform simple tests with support • Begin to use simple equipment • Start to discuss what they have found out

Year 2	<ul style="list-style-type: none"> • Observe closely • Ask and raise their own scientific questions • Use first-hand practical experiences to find answers • Gather and record data using diagrams, words and charts • Perform simple tests • Use simple equipment • Discuss what they have found out
Year 3	<ul style="list-style-type: none"> • Develop skills of systematic observation • Ask relevant scientific questions and suggest how to answer eg <i>practical test v secondary source</i> • Develop different types of scientific enquiry • Gather, record and present data in a variety of ways eg <i>drawings, labelled diagrams, charts</i> • Report on findings orally and in writing using scientific language • Set up simple, practical enquiries • Understand comparative and fair tests • Use range of equipment to measure accurately • Use results to draw simple conclusions, make predictions and raise further questions • Identify similarities, differences and changes related to scientific processes and ideas
Year 4	<ul style="list-style-type: none"> • Make systematic observations • Generate and answer scientific questions using evidence • Select most appropriate type of scientific enquiry • Gather, record, classify and present data in a variety of ways • Report on findings orally and in writing using accurate scientific language • Suggest, set up and carry out simple practical enquiries • Understand comparative and fair tests • Confidently use a range of equipment to measure accurately • Use results to draw simple conclusions, make predictions and raise further questions • Identify similarities, differences and changes related to scientific processes and ideas
Year 5	<ul style="list-style-type: none"> • Independently decide which observations to make • Use science experiences to plan different types of enquiry • Record data/results of increasing complexity using diagrams, classifications keys, tables, bar and line graphs • Report and present findings from enquiries examining causal relationships and reliability of results • Recognise and control variables where necessary • Take measurements using a range of scientific equipment with accuracy and precision • Use test results to make predictions to set up further tests • Identify scientific evidence that has been used to support/refute arguments

Year 6	<ul style="list-style-type: none">• Independently decide which observations to make• Use science experiences to explore ideas and raise different types of question• Plan different types of scientific enquiry to answer questions• Decide how to record data/results of increasing complexity• Report and present findings from enquiries examining causal relationships and reliability of results• Recognise and control variables where necessary• Explain which variables need to be controlled and why• Take measurements using a range of scientific equipment with accuracy and precision, taking repeat readings where appropriate• Use test results to make predictions to set up further tests (comparative/fair) and explain reasoning• Identify scientific evidence that has been used to support/refute arguments
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