

Working Scientifically Curriculum and Knowledge Map



Scientific attitudes

- reproducibility
- understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas, together with the importance of
- evaluate risks.

Experimental skills and investigations

- ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience
- make predictions using scientific knowledge and understanding select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, whappropriate
- use appropriate techniques, apparatus, and materials during fieldwork and laboratory work, paying attention to health and safety
- make and record observations and measurements using a range of medifferent investigations; and evaluate the reliability of methods and sug

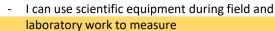


- apply mathematical concepts and calculate re
- present observations and data using appropriate methods, including tables and graphs interpret observations and data, including identifying patterns and using observations
- measurements and data to draw conclusions
- present reasoned explanations, including explaining data in relation to predictions and hypotheses

Year

Year

Year



I can decide what observations and measurements to make

I can plan different types of scientific enquiry to answer questions

I can recognise controlling variables when setting up investigations

I can use test results to make predictions to inform future comparative and fair tests

I can set up fair tests

I can decide how I record my results I can use scientific vocabulary

I can use simple models to describe scientific ideas, identifying evidence to support or refute ideas

I can report on findings, draw conclusions, explaining any casual relationships

I can use scientific equipment during field and laboratory work to measure

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comparative and fair tests

I can set up fair tests

I can decide how I record my results

I can use scientific vocabulary

I can use simple models to describe scientific ideas,

identifying evidence to support or refute ideas

I can report on findings, draw conclusions, explaining any casual relationships

I can ask good questions for research

- I can use scientific vocabulary
- I can set up simple tests
- I can make careful observations
- I can make accurate measurements using equipment
- I can report on findings, draw conclusions and suggest improvements for future tests, written and oral explanations
- I can gather, record and classify data to answer
- I can record data using key vocabulary, diagrams, tables, graphs and charts
- I can identify similarities and differences using key evidence

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 - I can record data using key vocabulary, diagrams, tables, graphs and charts
- I can identify similarities and differences using key evidence

Year 3

I can observe closely, using simple equipment I can ask simple questions and recognise that they can be answered in different ways

I can perform simple tests

- I can compare and contrast, sort and group
- I can use scientific vocabulary
- I can identify, classify, categorise
- I can use my observations and ideas to suggest answers to questions
- I can gather and record data to help in answering questions

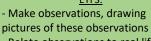
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Year

Year



- Relate observations to real life experiences and what they have read

EYFS: