



Ask Questions

- Ask questions
- Suggest answers to questions
- Ask relevant questions
- Use different types of scientific enquiry
- Use straightforward scientific evidence to answer questions
- Plan different types of scientific enquiries to answer questions
- Identify scientific evidence that has been used to refute/support ideas and arguments

Make Observations

- Observe closely
- Make systematic observations
- Independently decide which observations to make

Perform Tests

- Perform simple tests
- Set up simple practical tests
- Understand comparative and fair tests
- Recognise and control variables where necessary
- Explain which variables need to be controlled and why

Use Equipment

- Use simple equipment eg egg timers, hand lenses
- Use range of equipment to measure accurately eg data-loggers, thermometers
- Take measurements using a range of scientific equipment with accuracy and precision

Use Equipment

- Gather and record data
- Gather, record, classify and present data in a variety of ways
- Record findings using scientific language, drawings, labelled diagrams, keys, bar charts and table
- Report on findings orally and in writing
- Record data and results of increasing complexity using scientific diagrams, classification keys, tables, scatter graphs and line graphs
- Reports and present findings (including conclusions, casual relationships and reliability results) in oral and written forms eg *displays/presentations*

Analyse Data

- Discuss what they have found out
- Use results to draw simple conclusions, make predictions, suggest improvements and raise further questions
- Identify differences, similarities or changes related to scientific processes and ideas
- Use test results to make predictions to settle further comparative and fair tests
- Identify scientific evidence that has been used to refute/support ideas and arguments

Teacher Guidance

The 'working scientifically' objectives can be split into 6 main areas

- Ask Questions
- Make Observations
- Perform Tests
- Use Equipment
- Gather Data
- Analyse Data

(Suggested coverage)

Please note: schools are only required to teach the relevant PoS by the end of the Key Stage so there is flexibility around coverage.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plants	•	•	•			
Animals (including humans)	•	•	•	•	•	•
Living things and their habitats		•		•	•	•
Materials	•	•			•	
Seasonal changes	•					
Rocks			•			
Lights		•				•
Forces/magnets			•		•	
States of matter				•		
Sound				•		
Electricity				•		•
Earth and space					•	
Evolution & inheritance						•