

**SHEVINGTON FEDERATION SCHEMES OF WORK
WORKING SCIENTIFICALLY**

These objectives are to be worked through science topics and links to mathematical skills must be made.

Misconceptions must be addressed at the point of occurrence

P146,p154 p 166 of the New National Curriculum lays down the strong foundations for how this subject must be taught in our school.

Y4 children will learn :	Level	Autumn	Spring	Summer
OBSERVATION WITH EQUIPMENT				
To make a series of observations appropriate to the investigation				
To put forward the ideas about how to answer a question ...is it research or tests ...considering resources available in school.	3			
SETTING UP TESTS				
About the need to collect data to help support answering questions	3			
Select and use suitable equipment to create a fair test.	3			
About the term 'variable'	3			
To understand that changing one variable makes a fair test.	3			
IDENTIFYING AND CLASSIFYING				
To sort and classify objects and data giving reasons using scientific vocabulary	3			
PERFORMING TESTS AND TAKING MEASUREMENTS				
To demonstrate how to use a wider range of equipment with care, accuracy and increased independence. To identify the important things to record.	3			
To include measurements such as length or mass in their taking of measurements in tests or observation.	3			
RECORDING OF FINDINGS				
To record what happens in a labeled scientific diagram.	3			
To create a table format of their own, selecting their own headings, and using to make repeat recordings.	3			
To construct a bar chart of data using their own scale and begin to use line graphs to record findings.	3			
To use suitable ICT programs to record findings and generated charts and graphs.	3			
DRAWINGS CONCLUSIONS				
To notice simple patterns in their recorded results and to begin to explain these patterns. To relate their findings to evidence from their graphs/charts/tables.	3			
Communicate their findings, using scientific vocabulary, and say whether what happened was what they expected to happen.	3			
Relate their findings to evidence from their graphs/charts/tables.				
Make a general statement about what they have found out and begin make connections with the real world.	3			
State how they would improve their investigation and why.	3			