

**Shadsworth Junior School Science
Working Scientifically Skills Progression**

	Year 3	Year 4	Year 5	Year 6
Asking and answering questions	Ask questions and set up experiments to answer these questions.	Ask relevant questions and use different types of experiments to answer these questions.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables.	Plan different types of scientific enquiry to answer their own or others' questions, including recognising and controlling variables where necessary.
Making predictions	Make predictions and begin to give a reason.	Make predictions and give a reason using simple scientific vocabulary.	Make predictions and give a reason using scientific vocabulary.	Make predictions and give a reason using scientific vocabulary. Base predictions on findings from previous investigations.
Making Observations	Make systematic and careful observations.	Make systematic and careful observations.	Plan and carry out comparative and fair tests, making systematic and careful observations.	Make their own decisions about which observations to make, using test results and observations to make predictions or set up further comparative or fair tests.
Measuring and equipment	Take accurate measurements using standard units.	Take accurate measurements using standard units and a range of equipment, including thermometers and data loggers.	Take measurements using a range of scientific equipment with increasing accuracy and precision.	Choose the most appropriate equipment in order to take measurements, explaining how to use it accurately. Decide how long to take measurements for, checking results with additional readings.
Identifying and classifying	Talk about criteria for grouping, sorting and categorising, beginning to see patterns and relationships.	Identify similarities/differences/changes when talking about scientific processes. Use and begin to create simple keys.	Use and develop keys to identify, classify and describe living things and materials.	Identify and explain patterns seen in the natural environment. Group and classify things and recognise patterns.

Practical Investigations	Set up simple and practical enquiries, comparative and fair tests.	Set up simple and practical enquiries, comparative and fair tests.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables.	Plan different types of scientific enquiry to answer their own or others' questions, including recognising and controlling variables where necessary.
Recording and reporting findings	Record their findings using simple scientific language, drawing, labelled diagrams, keys, bar charts and tables.	Gather, record, present and talk about the results in a variety of ways to help in answering questions.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, scatter graphs, bar and line graphs.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, scatter graphs, bar and line graphs.
Drawing conclusions	Use results to draw simple conclusions, make predictions for new values and raise further questions.	Use results to draw simple conclusions, make predictions for new values and raise further questions.	Report and present findings from enquiries in conclusions using both oral and written form	Report and present findings from enquiries in conclusions using both oral and written form using presentations and displays.
Evaluating and raising further questions	Use straightforward scientific evidence to answer questions and support findings.	Use scientific evidence to answer questions and support findings. Identify differences, similarities or changes related to simple scientific ideas and processes.	Identify scientific evidence that has been used to support or refute ideas or arguments. Use test results to set up further comparative and fair tests.	Describe and evaluate their own and other peoples scientific ideas related to science topics, using evidence from a range of sources. Find this out using a range of secondary sources of information.