SCIENCE – INVESTIGATIVE SKILLS

YEAR GROUP	ASKING QUESTIONS	MEASURING AND RECORDING	CONCLUDING	EVALUATIING	VOCABULARY
EYFS	• Explain why some things occur, and talk about changes. • Ask and answer simple questions	• Looks closely at similarities, differences, patterns and change. • Talk about the features of their own immediate environment. • Make observations of animals and plants • Select the tools that they need to observe and investigate	• Talk about how environments might vary from one to another. • Explores materials suitability for purpose e.g. which would be a good material to make a boat?		Science Experiment Find out Ideas Test Explain Reason Why Change Explore Discuss
Year 1 and 2	• Ask simple questions and recognise that they can be answered in different ways	• Observe closely, using simple equipment • Perform simple tests • Gather and record data to help in answering questions	• Identify and classify • Use their observations and ideas to suggest answers to questions		Question Answer Observe Equipment Identify Group Sort Describe Similarities Differences Compare Record Diagram Chart results
Year 3 and 4	• Ask relevant questions and use different types of scientific enquiries to answer them • Set up simple practical enquiries, comparative and fair tests	• Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Gather, record, classify and present data in a variety of ways to help in answering questions	• Identify differences, similarities or changes related to simple scientific ideas and processes • Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Use straightforward scientific evidence to answer questions or to support their findings	• Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Oral and written explanations Prediction Conclusion Criteria Observation Evidence Improve Secondary sources Changes Guides Construct Interpret Explanation Relevant questions, Scientific enquiry Comparative and fair test, Accurate measurements
Year 5 and 6	• Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	• Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	• Identify scientific evidence that has been used to support or refute ideas or arguments • Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results • Present results in oral and written forms such as displays and other presentations	• Use test results to make predictions to set up further comparative and fair tests	Plan Variables Accuracy precision Repeat readings Validity Systematic Patterns Measurements Quantitate measures Identify, classify and describe