'Key Sheet' – Working Scientifically

Year Group; Y4

Key Skills	Key Content
• Put forward ideas about testing and make predictions. • Suggest questions that can be tested • Suggest ways to ensure a test is fair. • Ensure tests are carried out fairly and accurately and begin to think about why measurements of length should be repeated. • Make relevant observations and comparisons. • Make measurements of temperature, time and force as well as measurements of length. • Record findings using graphs, drawings, diagrams and tables. • Create conclusions based on findings • Identify simple patterns and suggest explanations. • Explain what the evidence shows in a scientific way and use it to answer questions	• Asking relevant questions and using different types of scientific enquiries to answer them • Setting up simple practical enquiries, comparative and fair tests • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identifying differences, similarities or changes related to simple scientific ideas and processes • Using straightforward scientific evidence to answer questions or to support their findings.
Key questions	**Key Vocabulary**
• What would you like to find out? What could we test? • What are we going to measure/observe? • What do you think will happen? • What equipment will we need? • How can we keep the test fair? • What will change? • What will stay the same? • Why might tests need to be repeated? • Why might readings need to be checked? • What is the measurement? • How could we record our findings? • What do you notice from your data? • Can you see any patterns in your data? • What does that show? • Why do you think that happened? • What would happen if….	Measure Time Temperature Length Prediction Conclusion Fair test Repeat testing Data Graph Table Diagram patterns