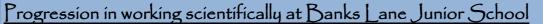**Lower Key Stage 2—Year 3**
**KEY VOCABULARY:** gradually, identify, observe, recognise, investigate, record, units, table, fair, evidence, research, length, observations, prediction.
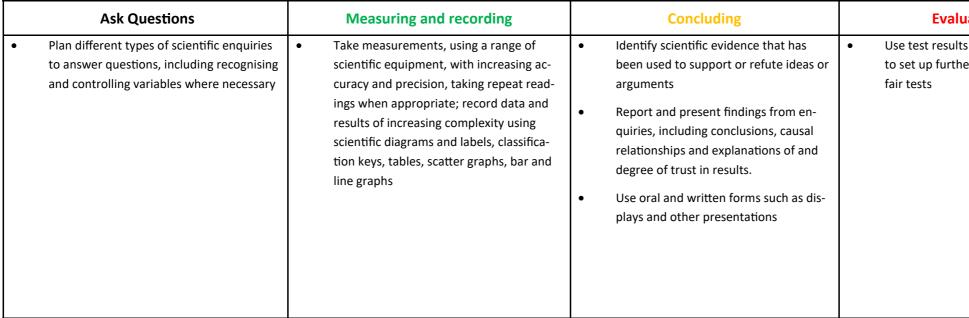
**Lower Key Stage 2—Year 4.**
**KEY VOCABULARY:** similarities, differences. research and source scientists, discovery, process, cycle, measurements, conclude, evaluate, rank, plan, vary, constant, bar graph, table, tally.

| Ask Questions | Measuring and recording | Concluding | Evaluating |
|---|---|---|---|
| • Ask relevant questions and use different types of scientific enquiries to answer them.<br>• Set up simple practical enquiries.<br>• Set up 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<br><br>• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables<br><br>• 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<br><br>• Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions<br><br>• 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 |

## Progression in working scientifically at Banks Lane Junior School

**Aims of teaching children to work scientifically at BLJS:**

- To equip children with the skills and knowledge to go on the scientific pursuit of answering the why, how and what if questions they pose.
- To nurture their natural curiosity and ensure it is not lost as they progress through school and grow older.
- To equip them with the scientific knowledge required to understand the uses and implications of science, today and for the future.

| Ask Questions | Measuring and recording | Concluding | Evaluating |
|---|---|---|---|
| • 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<br><br>• Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results.<br><br>• Use oral and written forms such as displays and other presentations | • Use test results to make predictions to set up further comparative and fair tests |

**Upper KS2. Year 6**
**KEY VOCABULARY:** hypothesis, variable, constants, evaluate, plan, conclude, interpret, classify, categorise, database enquiry, control, repeat, support, refute, degree of trust, scatter graph.

**Upper KS2 Year 5**
**KEY VOCABULARY:** classify, interpret, pattern, relationship prediction, analyse, conclude, evaluate, rank, variable, constants, control, repeat, key relationship, line graph.