

St Mary's Primary School Science Skills Progression Ladder

| OUGHBOROUG T | <u>EYFS</u> | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 | YEAR 6 |
|---|--|---|---|---|--|--|---|
| Planning & predicting | Ask questions how things change; plants, animals etc. | Suggest what might happen and ways to test ideas. | With support, suggest some ideas and ask questions. Think about and discuss tests that are fair or unfair. | Respond to suggestions. Make prediction and consider what makes a fair test. In groups carry out fair tests. | Recognise the purpose in collecting data to answer questions. Consider what constitutes a fair test. | Recognise that ideas are based on knowledge & creative thinking. Make predictions and suggest methods of testing, collect evidence and independently suitable equipment. | Consider how other scientists have combined evidence from observation and measurement. Suggest new ideas and explanations for phenomena, ensure evidence collected is sufficient. |
| Investigating & observing | Talk about features of their environment and how they vary. | Make observations using senses. Explore using the five senses. Make simple comparisons. | Make observations & comparisons using simple equipment, following simple instructions. Use experiences to answer questions. | Make observations and comparisons by measuring length, volume and time using equipment. Use experience and information sources to answer questions. | Make relevant observations & comparisons. Give reasons why measurements of length should be repeated. Begin to explain why a test is fair. | Carry out a fair test, explain why observations need to be repeated. Select information from provided sources. | Identify key factors for a fair tesr. Make a variety of observations and measurements correctly. Decide what checks need to be repeated so data is reliable. |
| Recording, analysing & evaluating | Show an interest in using IT to photograph their observations or draw their observations captioned by adult support. | Communicate findings in simple ways. Collect evidence to try to answer a question. | Record findings in simple ways using tables & graphs. Talk about what happened and make simple conclusions. | Communicate findings in a variety of ways. Explain what was expected and compare to what did happen. Identify patterns. | Explain what the evidence shows in a scientific way and link to previous predictions. Also consider improvements. | Communicate findings in a variety of variety of ways, identify patterns and communicate findings in tables, charts and line graphs using ICT. | Using ICT communicate findings (year 5) and identify and explain differences. Improve methods in their work giving suggestions for the future. |