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| **Treales CE Primary School**  **Working Scientifically Progression** | | | | |
| **stage**  **skills** | **EYFS**  **Reception** | **KS1**  **Year 1 and 2** | **Lower KS2**  **Years 3 and 4** | **Upper KS2**  **Years 5 and 6** |
| **PLAN**  **Ask questions, make predictions, decide on the method and**  **equipment** | * Listen attentively and respond to what they hear with relevant questions | * ask simple questions and recognise that they can be answered in different ways | * Ask relevant questions and use different types of scientific enquiries to answer them * Set up simple practical enquiries, comparative and fair tests | * Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary |
| **DO**  **Carry out an enquiry using equipment** | * Show an ability to follow instructions involving several ideas or actions * Be confident to try new activities * Use a range of small tools * safely use and explore a variety of materials, tools and techniques | * observe closely, using simple equipment * perform simple tests * identify and classify | * make systematic and careful observations and, where appropriate, take accurate measurements using standard units, use a range of equipment, including thermometers and data loggers | * take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate |
| **RECORD**  **Use drawings, tables or graphs to note observations and measurements** | * Explore the natural world around them, making observations and drawing pictures of animals and plants | * gather and record data to help in answering questions | * gather, record, classify and present data in a variety of ways to help in answering questions * record findings using simple scientific language, drawings, labelled diagrams, keys,   bar charts, and tables | * record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line   graphs |
| **REVIEW**  **Interpret, communicate and evaluate results** | * Participate in discussions, offering their own ideas, using recently introduced vocabulary * Offer explanations for why things might happen * Express their ideas and feelings about their experience * Know some similarities and differences… drawing on their experiences | * use their observations and ideas to suggest answers to questions | * report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions * use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions * identify differences, similarities or changes related to simple scientific ideas and processes * use straightforward scientific evidence to   answer questions or to support their findings | * use test results to make predictions to set up further comparative and fair tests * report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations * identify scientific evidence that has been used to support or refute   ideas or arguments |

Progression in Working Scientifically Vocabulary

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| EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| question, | question, answer, observe, | | question, answer, observe, | | plan, variables, | |
| answer, | observing, equipment, identify, | | observing, equipment, | | measurements, accuracy, | |
| observe, | sort, group, compare, | | identify, sort, group, compare, | | precision, repeat readings, | |
| same, | differences, similarities, | | differences, similarities, | | predictions, further | |
| different | describe, measurements, test, | | describe, measurements, test, | | comparative and fair test, | |
|  | results, secondary sources | | results, secondary sources | | identify, classify and describe, | |
|  | record – diagram, chart | | record – diagram, chart | | patterns, systematic, | |
|  |  | | Working Scientifically oral and | | quantitative measurements | |
|  |  | | written explanations, | | report data – scientific | |
|  |  | | conclusion, predictions, | | diagrams, labels, classification | |
|  |  | | criteria, classify, changes, data, | | keys, tables, scatter graphs, | |
|  |  | | contrast, evidence, improve, | | bar graph and line graphs | |
|  |  | | secondary sources, guides, | | report and present – | |
|  |  | | keys, construct, interpret | | conclusions, casual | |
|  |  | | research – relevant question | | relationships, explanations, | |
|  |  | | equipment – thermometer, | | degree of trust, oral and | |
|  |  | | data – gather, standard units, | | written display and | |
|  |  | | record, classify, present record | | presentation evidence – | |
|  |  | | – drawings, labelled diagrams, | | support, refute, ideas or | |
|  |  | | keys, bar charts, tables | | arguments biology, physics, | |
|  |  | |  | | chemistry | |