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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
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| **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 |