**![Logo

Description automatically generated]()**

**Science Curriculum Intent Statement**

**At Woodside C of E Primary School there is equal ambition for all pupils to learn and achieve. Our curriculum is rooted with equal measures of knowledge and skills. It is focused on ‘knowing more and remembering more’ and has a base that surrounds our locality and community.**

Working Scientifically Skills:

KS2 Curriculum Progression

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Asking and answering questions** | Use ideas to pose questions, independently, about the world around them. | Suggest relevant questions and know that they could be answered in a variety of ways, including using secondary sources such as ICT. Answer questions using straight forward scientific evidence. | Raise different types of scientific questions, and hypotheses. | Pose/select the most appropriate line of enquiry to investigate scientific questions. |
| **Making predictions** | Make predictions and begin to give a reason. | Make predictions and give a reason using simple scientific vocabulary. | Make predictions and give a reason using scientific vocabulary. | Make predictions and give a reason using scientific vocabulary.  Base predictions on findings from previous investigations |
| **Making observations** | Make decisions about what to observe during an investigation. | Make systematic and careful observations. | Plan and carry out comparative and fair tests, making systematic and careful observations. | Make their own decisions about which observations to make, using test results and observations to make predictions or set up further comparative or fair tests. |
| **Equipment and measurements** | Take accurate measurements using standard units. | Take accurate measurements using standard units and a range of equipment, including thermometers and data loggers. | Take measurements using a range of scientific equipment with increasing accuracy and precision. | Choose the most appropriate equipment in order to take measurements, explaining how to use it accurately.  Decide how long to take measurements for, checking results with additional readings. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Identifying and classifying** | Talk about criteria for grouping, sorting and categorising, beginning to see patterns and relationships. | Identify similarities/differences/changes when talking about scientific processes.  Use and begin to create simple keys. the natural environment. | Use and develop keys to identify, classify and describe living things and materials. | Identify and explain patterns seen in the natural environment. |
| **Engaging in practical enquiry (investigating)** | Discuss enquiry methods and describe a fair test. | Make decisions about different enquiries, including recognising when a fair test is necessary and begin to identify variables. | Plan a range of science enquiries, including comparative and fair tests. | Select and plan the most suitable line of enquiry, explaining which variables need to be controlled and why, in a variety of comparative and fair tests. |
| **Recording and reporting findings** | Record their findings using scientific language and present in note form, writing frames, diagrams, tables and charts. | Choose appropriate ways to record and present information, findings and conclusions for different audiences (e.g. displays, oral or written explanations). | Record data and results of increasing complexity using scientific diagrams, labels, classification keys, tables, bar and line graphs and models. | Choose the most effective approach to record and report results, linking to mathematical knowledge |
| **Drawing conclusions** | Draw, with help, a simple conclusion based on evidence from an enquiry or observation. | Use recorded data to make predictions, pose new questions and suggest improvements for further enquiries. | Use a simple mode of communication to justify their conclusions on a hypothesis.  Begin to recognise how scientific ideas change over time. | Identify validity of conclusion and required improvement to methodology.  Discuss how scientific ideas develop over time. |
| **Analysing data**  **Evaluating and raising further questions and predictions** | Gather, record and use data in a variety of ways to answer a simple question. | Identify changes, patterns, similarities and differences in data to help for conclusions.  Use scientific evidence to support their findings. | Use relevant scientific language and illustration to discuss, communicate and justify their scientific ideas. | Identify and explain causal relationships in data and identify evidence that support or refutes their findings, selecting fact from opinion. |