Progression at HPS in Working Scientifically skills in Science

Year Group	Skills: What children will be able to do:
EYFS	• listen attentively and respond to what they hear with relevant questions • 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 • explore the natural world around them, making observations and drawing pictures of animals and plants • 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 experiences know some similarities and differences… drawing on their experiences
Y1	• ask simple questions and recognise that they can be answered in different ways • observe closely, using simple equipment • perform simple tests • with support, gather and record data to help in answering questions • use their observations and ideas to suggest answers to questions
Y2	• ask questions and recognise that they can be answered in different ways • observe closely, using different equipment • perform simple tests • gather and record data to help in answering questions • use their observations and ideas to suggest answers to questions
Y3	• ask relevant questions and use different types of scientific enquiries to answer them • set up simple practical enquiries, comparative and fair tests • make systematic and careful observations using a range of equipment • 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

	• 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
Y4	• ask increasingly relevant questions and use different types of scientific enquiries to answer them • set up more complicated practical enquiries, comparative and fair tests and begin to say why they are fair • make systematic and careful observations and, where appropriate, take accurate measurements using standard units, use a range of equipment • gather, record, classify and present data in a variety of ways to help in answering questions and begin to say why a specific type of chart is more appropriate to the results • record findings using developing scientific language, drawings, labelled diagrams, keys, bar charts, and tables • report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions with more reflection on the investigation • use results to draw more developed conclusions, make predictions for new values, suggest improvements and raise further questions • identify differences, similarities or changes related to scientific ideas and processes • use straightforward scientific evidence to answer questions or to support their findings with increased confidence
Y5	• 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 • 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

Y6	• plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary, recognising the dependent and independent variable • take measurements, using a range of scientific equipment of their choosing, 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 and be bale to say why each one has been used in that particular investigation • use test results to make predictions, based on previous knowledge, to set up further comparative and fair tests • report and confidently 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