Gladstone Road Primary School Science

Curriculum design, LTP & Vocabulary Progression 2020/2021

WORKING SCIENTIFICALLY PROGRESSION DOCUMENT							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
PLAN							
Recognise the best type of enquiry to answer a question	Asks how and why questions about their experiences and in response to stories or events.	With help and encouragement, I ask simple questions that begin with why, what, if, how or when.	I ask simple questions and recognise these questions can be answered in different ways.	I can ask questions and I recognise that there are different types of enquiry.	I ask relevant questions and use different types of scientific enquiries to answer them.	I ask relevant questions (containing scientific knowledge and understanding) and with help I recognise which type of enquiry is best to answer a question.	I ask relevant questions (containing scientific knowledge and understanding) and I recognise which type of enquiry is best to answer a question.
Choose equipment, select tests, use secondary sources to decide how to obtain accurate observations and measurements.	Uses a range of vocabulary in imaginative ways to add information, express ideas or to explain or justify actions or events.	I make suggestions about how to do things when we plan a simple test.	I decide with help, what to find out, observe or measure.	I can set up a simple practical enquiry and I am beginning to understand how to make a fair test. I make suggestions about what observations and measurements to make and what equipment I need.	I can set up simple practical enquiries, comparative or fair tests. I decide what observations and measurements to make and what equipment to use.	I decide what observations and measurements to make (controlling variables with help where necessary) and what equipment to use to make my measurements and observations.	I can plan different types of science enquiries to answer questions. I recognise and control variables where necessary. I decide what observations and measurements to make (controlling variables where necessary) and what equipment to use (giving reasons) to make my measurements and observations.

Gladstone Road Primary School Science

Curriculum design, LTP & Vocabulary Progression 2020/2021

DO							
Obtain observations and measurements using equipment and/or secondary sources	Carries out instructions which contain several parts in a sequence.	With help, I use simple equipment and non-standard units to find things out. I observe using my senses.	I observe closely, using simple equipment and non-standard units. I can identify and classify. I can perform a simple test.	I am beginning to make systematic and careful observations. I sometimes use standard units. With help, I can use information sources provided to find things out.	I use a range of equipment (including thermometers and dataloggers). I make systematic and careful observations and take accurate measurements using standard units. I use information sources provided to find things out.	I use a range of equipment independently. The series of observations and measurements I take are adequate for the task. I use information sources provided to find things out. I identify possible risks to myself and others.	I take measurements using a range of scientific equipment with increasing accuracy and precision. I take repeated readings when appropriate. I use relevant information sources to find things out. I identify possible risks to myself and others.
Record observations and measurements	Writes for different purposes.	With help, I can gather and record data to help me answer my question.	I gather data and record data to help me answer my questions. I record what I have found out using e.g words or pictures, tables or simple prepared formats.	I gather data and using a pre-prepared table, I can record data. I record my findings using a drawing and/or word.	I gather, record and classify data in a variety of ways to help me answer my questions. I record my findings using simple scientific language, tables, drawings and labelled diagrams	I gather and record non-complex results (data and observations) using e.g. tables, and scientific diagrams	I record data and results of increasing complexity using e.g. scientific diagrams and labels and tables. I choose a method to suit results e.g. a two-column table

Gladstone Road Primary School Science

Curriculum design, LTP & Vocabulary Progression 2020/2021

Present observations and measurements				With help, I can present my data.	I present the information using e.g. Venn diagrams, bar charts and simple scatter graphs and keys.	I present the results (data and observations) in a range of formats e.g. line graphs, keys and frequency charts	I present the results (data and observations) in suitable formats e.g. line graphs, bar graphs, scatter graphs and classification keys
REVIEW							
Draw conclusions and make explanations	Develops their own narratives and explanations by connecting ideas or events.	I talk about what happened and/or what I saw.	I use my observations and ideas to suggest answers to my questions.	I can use my results when I talk about what happened.	I use my results to draw simple conclusions and I make predictions for new values. I communicate what I have found out using straightforward scientific ideas and I report my findings using oral and written explanations and displays.	I draw conclusions from my data and observations. I begin to use basic scientific evidence to support or refute the ideas or arguments for my conclusion.	From my data and observations, I draw valid conclusions (i.e. consistent with the evidence) including causal relationships. I use scientific evidence to support or refute the ideas or arguments for my conclusion
Evaluate the data collected						I look at results and decide if any observations or measurements are unsuitable, giving a reason.	I look at results and decide if any observations or measurements are unsuitable and need to be carried out again. I offer simple

							explanations for differences in results.
Evaluate the process used (including next steps)	Reviews their work and suggests how it could be approached differently. Uses a range of vocabulary to explain events.	I talk about what I did.	I talk about how I found out what I found out.	I can talk about what went wrong. I have ideas about what else I would like to find out.	I suggest improvements to the way I carried out the enquiry. I suggest further questions to investigate.	I use what I have found out to suggest improvements to my work giving reasons. I can set up further questions to investigate.	I use my results to make predictions to set up further enquiries e.g. comparative and fair tests and suggest how my working methods could be improved, with reasons.