Tollgate PRIMARY SCHOOL

Science – Progression of Key Skills and Knowledge

Cohort	Autumn	Spring	Summer
EYFS	Understanding the world Identifying materials and their properties Introduction to basic scientific concepts e.g. floating and sinking,- how things change e.g. burning. Magnetism Experimentation - (adapting and modifying) Observing living things – lots of growing Non-standard data collection Observing the natural world. E.g. weather Observing, describing, simple classification, communicating, comparing		
Year 1	**Observing** **Use simple equipment to observe closely** **Communicating** **Ask simple questions and recognise that they can be answered in different ways.** **Classify and comparing** **Identify and classify using t-charts.**	**Communicating** **Use observations to suggest answers to questions** **Gathering data** **Gather and record data to help in answering questions.** **Classifying and comparing** **Identify and classify using in a range of tables/venn diagrams.**	**Measuring** **Take simple measurements using non-standard units.** **Gathering data** **Perform simple tests.** **Predicting** **Make simple predictions.**
Year 2	**Observing** **Use simple equipment to observe closely.** **Communicating** **Ask simple questions and recognise that they can be answered in different ways including use of scientific language.** **Classifying and comparing** **Identify, group and classify using in a range of tables/venn diagrams**	**Communicating** **Use observations to suggest answers to questions noticing similarities, differences and patterns.** **Gathering data** **Perform simple comparative tests.** **Observing** **Use simple equipment to observe closely including changes over time.**	**Gathering data** **Gather and record data to help in answering questions, including from secondary sources of information.** **Predicting** **Begin to explain predictions using prior knowledge and understanding of topics.**

	Measuring **Take simple measurements using non-standard units.** **Gathering data** **Gather and record data to help in answering questions.**		
Year 3	**Observing** **Make systematic and careful observations.** **Measuring** **Take accurate measurements using standard units** **Communicating** **Ask relevant questions and use different types of scientific enquiries to answer them.** **Making models** **Record findings using simple scientific language, drawings, labelled diagrams** **Classifying and comparing** **Identify differences, similarities or changes related to simple scientific ideas and processes.** **Gathering data** **Gather, record, classify and present data in a variety of ways.**	**Measuring** **With some support, use a range of equipment to take accurate measurements including thermometers and data loggers.** **Communicating** **With some support, report on the findings of enquiries including oral and written explanations, displays of results and conclusions.** **Gathering data** **With some support, set up simple, practical enquiries comparative and fair tests.**	**Communicating** **Use straightforward scientific evidence to answer questions.** **Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.** **Making models** **With support, record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.**
Year 4	**Observing** **Make systematic and careful observations.** **Measuring** **Take accurate measurements using standard units**	**Measuring** **Use a range of equipment to take accurate measurements including thermometers and data loggers.** **Communicating** **Report on the findings of enquiries**	**Communicating** **Use straightforward scientific evidence to answer questions.** **Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further**

	Communicating **Ask relevant questions and use different types of scientific enquiries to answer them.** **Making models** **Record findings using simple scientific language, drawings, labelled diagrams** **Classifying and comparing** **Identify differences, similarities or changes related to simple scientific ideas and processes.** **Gathering data** **Gather, record, classify and present data in a variety of ways.**	**including oral and written explanations, displays of results and conclusions.** **Gathering data** **Set up simple, practical enquiries comparative and fair tests.**	**questions.** **Making models** **Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.**
Year 5	**Measuring** **Take measurements using a range of scientific equipment.** **Gathering data** **Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.** **Making models** **Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.** **Communication** **Report and present findings from enquiries including conclusions, causal relationships, and explanations of and degree of trust in**	**Measuring** **Take measurements with increasing accuracy and precision.** **Making models** **Record data and results of increasing complexity**	**Measuring** **Take repeat readings of measurements when appropriate.** **Communicating** **Identify scientific evidence that has been used to support or refute ideas or arguments.**

	results, in oral and written forms.		
Year 6	**Measuring** **Take measurements using a range of scientific equipment.** **Gathering data** **Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary.** **Making models** **Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.** **Classifying and comparing** **Group and classify things and recognise patterns**	**Measuring** **Take measurements with increasing accuracy and precision.** **Gathering data** **Use test results to make predictions to set up further comparative and fair tests.**	**Measuring** **Take repeat readings of measurements when appropriate.**