## **Cleobury Mortimer Primary School – Skills Progression**

Science

	Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Investigative skills	Early Years To ask simple questions when exploring a range of scientific materials and settings. To use senses to investigate similarities and differences between objects. To talk about the features of their environment and how environments change from one another. To make observations of animals and plants and explain changes.	Year 1 With support, turn own ideas into investigations- can do this as a class/ pairs if guided. To make a prediction for an investigation, with support. To use simple equipment that is provided for the investigation. To make observations in response to prompts, and record with guidance using a given chart. To record results of investigations using non- standard units.	Year 2 To turn own ideas into an investigation, making a simple hypothesis to support theories. To begin to recognise whether a test is fair or not. Record observations using a given template. Use simple equipment provided. To begin to use standard units for recording- for example CM, M, G, KG etc. To record results using a given template e.g table/ bar chart.	Year 3 To use 'what we already know' to make a hypothesis for an investigation. To recognise whether a test is fair or not. With support, carry out an investigation, explaining whether it is fair or not and why. Choose equipment appropriate for the investigation from a given selection. Record observations in simple tables and begin to discuss trends and patterns within results. Record observations in a variety of ways. Make accurate measurements. Use a range of equipment with accuracy and understanding. Use appropriate bar charts, graphs and conclusions to present results.	Year 4 To use prior knowledge to make a prediction, giving reasons for choices. To recognise whether a test is fair or not, and give reasons as to why. To choose appropriate equipment needed for experiment and use it with precision. To record observations accurately, using standard measurements and a range of methods. To record observations in a variety of ways, discussing abnormalities as they occur. Present observations and measurements clearly. To use appropriate bar charts, graphs and tables to present results. Within this, begin to plot simple points on a graph.	Year 5 To make independent predictions for an investigation, justifying reasons. To plan to use different types of scientific enquiry to answer questions, including control variables where necessary. To select measuring instruments independently. To use these with precision and care. Decide on an appropriate approach for an enquiry. Explain within a fair test, why only one factor should be changed. To ask questions that could then lead onto another enquiry. To decide within a group, what evidence needs to be collected from the investigation. To plot points on a simple graph, as a way of recording results- such as bar charts and line graphs. Recognise the need to repeat observations and measurements.	Year 6 To make independent predictions for an investigation, using subject knowledge to support ideas. To plan to use a wide range of scientific enquiries to answer key questions. To understand how to use variables to alter an investigation accordingly. To select measuring instruments independently. To use these with increasing accuracy and precision. To use equipment to be able to take repeat readings and observations. To record data and results of increasing complexity using scientific diagrams such as bar charts, scatter diagrams, pie charts and line graphs. To discuss findings of investigations within a small group and explain reasons. To be able to interpret findings independently. To report and present findings using a range of scientific methods- bar charts, tables, diagrams, explanations and presentations.
	explain changes.			understanding. Use appropriate bar charts, graphs and conclusions to present results. Use evidence to prove or disprove predictions, with reasons why.		graphs. Recognise the need to repeat observations and measurements.	To report and present findings using a range of scientific methods- bar charts, tables, diagrams, explanations and presentations. To identify scientific evidence that has been used to support or refute ideas.