



Ready to progress in Science

‘Somewhere, something incredible is waiting to be known’ Carl Sagan

‘Science is the process that takes us from confusion to understanding’ Brian Greene

At Gawber, we use formative assessment to check the knowledge and vocabulary that children acquire in their learning. Below are the *key questions and* summative statements for the end of each unit we focus on at Gawber.

CHEMISTRY	Materials and States of Matter
EYFS	○ What are things made of? ○ What happens when something melts, freezes and floats? ● Children name a range of everyday materials and can distinguish between the object and the materials from which it is made so that they can explain what things are made of. ● Children investigate melting, freezing and materials which float so that they understand what it means when something melts, freezes and floats.
Year 1	○ How could you describe this material? ○ Which material would you make an umbrella from and why? ● Children can name a range of materials and understand their properties so that they can describe a materials and why it may be used for a certain object. ● Children understand the properties of materials and how these can be grouped so that they can explain and understand what materials would be best to make an umbrella.
Year 2	● How do we choose materials? ● How would you sort these materials?

	• How can we change materials? • Children understand how to organise and sort materials in relation to their properties so that they can explain how we choose materials objects and jobs relating to their suitability. • Children can understand how solids can be changed by squashing, bending, stretching and bending so that they can explain confidently how materials can be changed.
Year 3	• Are all rocks the same? • What are fossils? • Children understand the simple properties of rocks so that they can explain whether all rocks are the same • Children explore fossils, how they are made and where they are found so that they can begin to explain what fossils are.
Year 4	• Is it a solid, liquid or gas? • Is water always wet? • Children understand the properties of solids, liquids and gases so that they can correctly identify these. • Children will understand the effect that heating and cooling has on a range of materials and begin to understand the stages of the water cycle so that they can explain whether water is always wet.
Year 6	• What are things made from and why? • Are all material changes permanent? • Children have a good understanding of a range of properties of materials, including thermal and electrical conductivity, so that they can explain with more accuracy what things are made from and why. • Children know the changes which can occur with different materials and identify which of these changes are reversible or irreversible so that they can explain whether changes made with materials are permanent or not.