

# Chemistry A Level Intent

*"Chemistry begins in the stars. The stars are the source of the chemical elements, which are the building blocks of matter and the core of our subject."* (Peter Atkins)

Chemistry is a versatile subject that is an essential pre-requisite for many courses. Our curriculum begins with the structure of the atom and chemical reactions and leads on to crucial topics on futuristic materials, Earths finite and renewable resources to environmental chemistry and how our planet is affected by human activity. Chemistry guides students to not only grow in confidence, become critical thinkers, but also someone who identifies to be part of a global community whose actions contribute to building values and practices.

Confident Learners	Confident Communicators	Confident Future Citizens
<p>To create <b>confident learners</b>, the Chemistry curriculum is:</p> <ul style="list-style-type: none"><li>• Diverse and inclusive and developed by specialist teachers</li><li>• Designed to challenge students but also allow them to achieve</li><li>• Celebrate success</li></ul>	<p>To create <b>confident communicators</b>, the Chemistry curriculum:</p> <ul style="list-style-type: none"><li>• Models and encourages students to form and share opinions on real world and curriculum topics</li><li>• Creates safe spaces where students can openly discuss and debate</li><li>• Model answers and techniques to create a framework for success</li></ul>	<p>To create <b>confident future citizens</b>, the Chemistry curriculum:</p> <ul style="list-style-type: none"><li>• Promotes and builds awareness and cultural capital around the use of materials and protecting the environment for future generations</li><li>• Gives real life examples with advantages and disadvantages</li></ul>
<p>The Chemistry curriculum provides <b>opportunities for all to:</b></p> <ul style="list-style-type: none"><li>• Undertake practical work</li><li>• Practice and develop maths skills</li></ul>	<p>The Chemistry curriculum provides <b>opportunities for all to:</b></p> <ul style="list-style-type: none"><li>• Discuss and explore</li><li>• Research methods and writing</li></ul>	<p>The Chemistry curriculum provides <b>opportunities for all to:</b></p> <ul style="list-style-type: none"><li>• Explore the relevance of chemistry and its contribution to society "better living through chemistry"</li></ul>

## The Key Concepts running through Chemistry

- Periodic table and trends
- Atomic structure and bonding
- Amount of substance
- Rates of chemical reactions and energy changes
- Organic chemistry
- Organic analysis