Y9 CHEMISTRY

SCIENCE AT YARDLEYS
INTENT: Science helps students gain an understanding of the world around them, from the micro-level of particles and atoms to the macro-level of our expanding universe. It encourages students to question and enquire in order to learn more. We want our students to acquire the scientific knowledge and skills to meet their academic, practical and "real life" challenges of the future.
Y9 SCIENCE
Year 9 will build on this knowledge and focus on the detailed chemistry knowledge building on the basic knowledge. This includes formulas and word/symbol/balancing equations, which is a build-up on prior learning.

YEAR 9

	Matter and Separating Mixtures	Overarching Concepts (Part 1)	Overarching Concepts (Part 2) Groups in the Periodic Table	Overarching Concepts (Part 3)	Chemical Changes (Part 1)	Chemical Changes (Part 2)
SUBSTANTIVE KNOWLEDGE	• Matter and Mixtures • Separating Mixture Techniques	• Atomic Structure • Development of the Periodic Table • Bonding and Properties (Ionic Substances)	• Bonding and Properties (Covalent and Metallic Substances) • Groups in the Periodic Table	• Calculations involving mass • Calculations involving moles	• Acids, Bases and Indicators • Making Salts	• Electrolysis
DISCIPLINARY KNOWLEDGE	• Interpreting data • Identify possible errors in investigations • Applying mathematical concepts • Suggesting improvements to scientific methods	• Using mathematical concepts • Applying scientific knowledge to experimental evidence	• Applying scientific knowledge to experimental evidence • Make observations	• Applying mathematical concepts	• Making observations • Applying mathematical concepts • Applying scientific knowledge to experimental evidence	• Applying scientific knowledge to experimental evidence

We aim to provide students with a curriculum that educates the whole child, creating responsible and respectful citizens. Through the development of substantive and disciplinary knowledge students are given the tools that allow them to achieve excellence and be ready for life.