

Key Stage 4 (10)	
Course title: Combined science: Trilogy or Separate science: Chemistry	
Exam board: AQA	
Specification code: 8464 or 8462	
Autumn 1 (September – October) to Autumn 2 (October – December)	Changes of state and energy in reactions Builds on KS3 knowledge of states of matter and real-world experience ensure this topic is concrete. Does not rely on atomic structure.
	Atomic structure and the Periodic table Foundation knowledge that underpins the rest of GCSE science. Follows recap of the idea of particles in previous topic.
Spring 1 (January – February) to Spring 2 (February – March)	Structure and bonding Builds on atomic structure topic with electron structure the key fundamental knowledge for bonding. Makes atomic structure topic more concrete as teaches the link between properties and types of bonding with real world examples.
Summer 1 (April – June) to Summer 2 (June – July)	Quantitative Foundation knowledge but challenging so placing this early on allows practice time. Also, very common as part of multipart exam questions so plenty of opportunity for practice in other topics.
	Metal extraction and acid theory The electrolysis of metals and the ionisation of acids builds from ionic theory and so this topic follows structure and bonding. It is the last paper 1 topic.

Key Stage 4 (11)	
Course title: Combined science: Trilogy or Separate science: Chemistry	
Exam board: AQA	
Specification code: 8464 or 8462	
Autumn 1 (September – October) to Autumn 2 (October – December)	<p>Rate of reaction and equilibria</p> <p>This topic requires application of particle theory, energy change and quantitative chemistry and so sits after these topics and provides lots of opportunity for retrieval of year 10 knowledge.</p>
	<p>Analysis</p> <p>This topic introduces the idea of purity linked to physical property – this is built in fractional distillation and so is a prerequisite for carbon chemistry. Spirals back to gas testing for CO₂ which links to combustion and atmosphere topics that follow.</p>
	<p>Carbon chemistry</p> <p>This topic contains complex content on separating techniques and properties linking with boiling points so teaching early in year 11 allows time for reinforcement. Spirals back to covalent bonding and the properties of simple molecules.</p>
Spring 1 (January – February) to Spring 2 (February – March)	<p>Earth's materials</p> <p>Many cross links with prior learning so as the last topic fits well with spiral curriculum to revisit other topics. E.g., metal extraction, separation techniques.</p>
Summer 1 (April – June) to Summer 2 (June – July)	<p>Revision for GCSEs</p>