The Fisher Way: Curriculum

The Fisher Way aims to educate and inspire with joy, faith an
love because we are an inclusive Catholic community.

Successful and resilient learners who aspire to and achieve excellence

Confident individuals who can explore and communicate effectively

Responsible citizens who are active, loving and wise in all their endeavours

Subject	Chemistry
Year Group	Year 8
Intent	Successful and resilient learners: who understand chemical concepts, apply them to unfamiliar situations and develop confidence through practical enquiry. Confident individuals: who approach problems and practical work with curiosity, communicate explanations clearly and evaluate evidence. Responsible citizens: who understand the local and global implications of chemistry, including its contribution to health, industry and the sustainable use of resources.

Narrative	Learners study metals, their reactions and extraction before considering the atmosphere, climate, pollution and the use of materials. The periodic table unit then connects atoms, elements and compounds to chemical formulae and balanced equations. This builds on Year 7 particles, acids, rocks and chemical reactions. Learners use patterns to make predictions and evaluate the environmental consequences of extracting resources and manufacturing products. By the end of the year, learners can connect observable chemical changes to a developing atomic model. This prepares them for Year 9 atomic structure, chemical analysis, energy changes and bonding.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	Metals and non-metals; reactions with oxygen and acids; reactivity and displacement.	Metal ores and extraction; uses of metals, alloys and corrosion.	Environmental chemistry: atmosphere, carbon cycle, greenhouse effect and climate change.	Pollution, recycling, acid rain, materials, plastics and fractional distillation.	Atoms, elements and compounds; development of the periodic table; Groups 1, 7 and 0.	Chemical formulae, conservation of mass, balancing equations and atomic structure.
Key skills	Compare reaction observations; identify patterns; use evidence to order metals by reactivity.	Relate properties to uses; explain extraction choices; evaluate corrosion prevention.	Interpret atmospheric and climate data; distinguish evidence from unsupported claims.	Evaluate materials and recycling; interpret distillation models; compare environmental impacts.	Use periodic-table patterns to predict properties; explain how scientific models develop.	Write formulae; balance simple equations; model atoms; use conservation of mass.

Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Cultural capital and careers	Metallurgy and engineering; chemical safety and appropriate material selection.	Mining and metal recycling; the social and environmental cost of extraction.	Climate science and environmental monitoring; informed discussion of global issues.	Waste management, materials science and the petrochemical industry.	Mendeleev and scientific classification; research and laboratory careers.	Chemical manufacturing and quality control; the importance of accurate measurements.
Assessment	Retrieval and short topic checks; practical feedback.	Cumulative assessment and recovery.	Short topic checks; practical and data questions.	Cumulative assessment and recovery.	Topic checks and targeted revision.	End-of-year assessment; feedback and recovery.