The Fisher Way: Curriculum

The Fisher Way aims to educate and inspire with joy, faith and 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 9
Intent	**Successful and resilient learners**: who understand a wide range of chemical concepts and can actively adapt to new situations **Confident individuals**: who can approach problems and practical situations in a curious and discerning way **Responsible citizens**: who can eloquently express the implications of chemistry on local, national and global issues, especially environmental ones.
Narrative	*How are they going to be different when they finish the year?*

	All learners will be better prepared to tackle the challenging Structures unit in year 10 by learning more in-depth detail on atomic structure and the periodic table. The reactivity of metals and reactions with acids practices balancing equation skills and skill of looking for patterns. C8 and C9 leads to a deeper understanding of our world and the challenges we face with the environment. *How does this link to what they have done before?* This builds on the work completed on the periodic table in year 8. The chemical reactions and earth studied in C4 year 8 provide the foundations for C8 and C9. *How does this set them up for the years to come?* Year 9 continues the spiral approach to science. We revisit the periodic table in bonding and structures in year 10. The equations practiced in C7 and the earth and carbon units C8 and C9 are revisited in C10 and form a big part as a foundation for C13 Water and Lifecycles unit, in year 11.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	C5 Atomic structure	C6 Periodic Table	C7a Reactivity of metals and reactions of acids	C7b Reactivity of metals and reactions of acids	C8 Purity, gases and earth	C9 Carbon chemistry
Key skills	Calculating mean using isotopic masses	Evaluation skills when looking at the different versions of the periodic table	Evaluation skills of different extraction methods for metals	Application of knowledge when discussing everyday examples of neutralisation	Evaluate the impact of greenhouse gases and discussions on how to reduce gases	Evaluate the supply and demand for different fuels.
Cultural capital	History of the atom- how the structure was developed, and scientists involved	Development of the periodic table- contributions of Newlands and Mendeleev	Understanding how the reactivity of different metals affect the extraction methods used. The impact of high grade/low grade ores	Understanding of everyday neutralisations e.g. antacids and how they work. Understanding the difference between strong and weak acids/alkalis during everyday life	Understanding of how greenhouse gases work their effects. Discuss how our carbon footprint can be reduced	Understand how different fuels are obtained and how plastics are formed from crude oil. Understand the products produced from complete and

						incomplete combustion
Assessment	C5 End of Unit Test	C6 End of Unit Test	C7a End of Unit Test	C7b End of Unit Test	C8 End of Unit Test	C9 End of Unit Test