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 13
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	

	All learners to develop their interest in and enthusiasm for Chemistry, including developing an interest in further study and careers associated with the subject. Learners will develop competence and confidence in a variety of practical, mathematical and problem solving skills. They will be able to evaluate the ways in which society uses science to inform decision making. The work builds on the Year 12 course studied and develops a further understanding of the more difficult concepts such as the rate equation and acids and bases. Further organic chemistry is taught, which builds on prior knowledge and introduces new families of molecules such as benzene. Year 13 builds upon Year 12 and key concepts are explained in more detail and are applied in more difficult and unfamiliar contexts.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	Thermodynamics, Rate equation	Electrochemical cells, Acids and bases and Kp	Period 3, Transition metals, Organic chemistry	Transition metals and Reactions of aqueous solutions, Organic chemistry and Analysis	Revision	
Key skills	Graph skills, calculating gradients, rearranging equations	Rearranging equations, significant figures, standard form	Research skills when applying to everyday life, Discussion/debate on drugs and their effects on the body	Data analysis, Practical skills, Application of knowledge	Exam skills- application of knowledge, data analysis, mathematical skills	
Cultural capital and careers	Application to industry and how compromises have to be made to balance out rate / equilibrium / cost / safety	Understanding of buffers and their everyday use e.g. in blood/shampoo.	Understanding of enantiomers and their effects e.g. thalidomide	Instrumental analysis used to identify compounds in bloods/forensics	Range of questions linking to everyday life e.g. fermentation of glucose to ethanol vs hydration of ethene. Evaluation of electrochemical cells and their uses.	

Assessment	End of Unit Test	End of Unit Test	End of Unit Test	End of Unit Test	End of Unit Test	