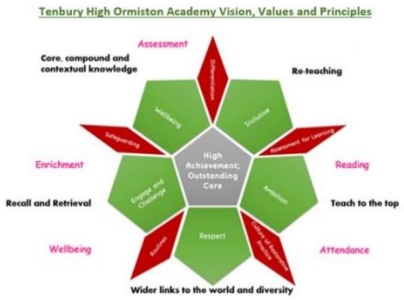
TENBURY HIGH
ORMISTON ACADEMY



Curriculum Overview for Chemistry
Year 11.3 and 11.4

Half Term 1: Chemical analysis **Substantive Knowledge:** ❑ Describe how we test for pure substances. ❑ Describe the use of formulation. ❑ Identify examples of formulations. ❑ Describe the chromatography required practical. ❑ Explain how paper chromatography separates mixtures ❑ Describe the test for hydrogen. ❑ Describe the test for oxygen ❑ Describe the test for chlorine. ❑ Describe the test for carbon dioxide **Disciplinary Knowledge:** ❑ Calculate Rf values, ❑ Interpret chromatograms ❑		Skim and Scan of source information Decoding terms Etymology of key terms Breaking down exam questions
		Chromatogram, Chromatography, spectroscopy,Formulation Impure substance, Litmus paper, Mobile phase, Precipitation, Pure substances, Rf value, Stationary phase
		Baseline Recall questions to start every lesson Exam questions in homework End of unit assessment
		Revision Card preparation for every lesson Exam questions - application
Half Term 2: The rate and extent of chemical change **Substantive Knowledge:** ▪ Describe how changing temperature, concentration, pressure, surface area affects rate of reaction. ▪ Explain using collision theory the effects of changing conditions temperature, concentration, pressure, surface area on rate of reaction. ▪ Describe how catalysts impact rate of reaction. ▪ Link how catalysts impact rate of reaction to reaction profiles. ▪ Identify the symbol for reversible reactions. ▪ Link exothermic and endothermic reactions to reversible reactions. **Disciplinary Knowledge:** ▪ Calculate mean rate of reaction. ▪ Draw and interpret graphs showing the quantity of product formed or reactant used. ▪		Skim and Scan of source information Decoding terms Etymology of key terms Breaking down exam questions
		Activation energy, Catalyst, Collision theory, Rate of reaction, Reversible reaction, concentrate
		Baseline Recall questions to start every lesson Exam questions in homework End of unit assessment
		Revision Card preparation for every lesson Exam questions - application