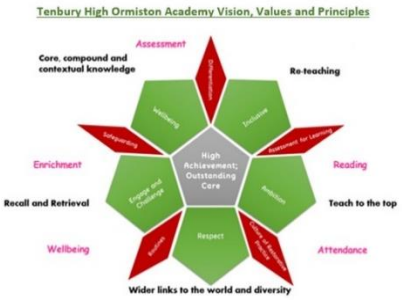
TENBURY HIGH
ORMISTON ACADEMY



Curriculum Overview for Chemistry
Year 11

Half Term 3: Using resources **Substantive Knowledge:** ▪ Describe how to test for pure water. ▪ Describe how to make potable water ▪ Describe ease of obtaining potable water from waste, ground and salt water. ▪ HT- Explain bioleaching and Phytomining. ▪ HT- Evaluate alternative biological methods of extracting metals. ▪ Compare LCA for plastic and paper bags. ▪ Evaluate ways of reducing the use of limited resources. ▪ T- Evaluate data about alloys. ▪ T- Explain how low density and high density poly(ethene) are both produced from ethene. ▪ T- Explain the difference between thermosetting and thermosoftening polymers in terms of their structure. ▪ T- Explain the Haber process. ▪ T- Compare fertilisers given information. Disciplinary Knowledge: • T- Describe experiments and interpret results to show that both air and water are necessary for rusting		Skim and Scan of source information Decoding terms Etymology of key terms
		Alloy, Bioleaching, Borosilicate glass, Composite, Corrosion, Desalination, Displacement, Electrolysis, Electroplating, Finite resources, Galvanise, Ground water, Life cycle assessment (LCA), NPK fertilisers, Ore, Phytomining, Potable water, Raw materials, Renewable resources, Sacrificial protection, Soda-lime glass, Sterilisation, Sustainable development, The Haber process, Thermosetting polymers, Thermosoftening polymers
		Baseline Recall questions to start every lesson End of unit assessment
		Revision Card preparation for every lesson Repetition of use of revision cards for end of unit assessment Exam questions - application
Half Term 4: Revision – Paper 1 **Substantive Knowledge:** • Describe electrolysis of aluminium oxide. • Explain why graphite electrodes need to be replaced in electrolysis. • Explain reactivity of group 0. • Explain reactivity of group 1. • Explain reactivity of group . • • **Disciplinary Knowledge:** ▪ Write half equations for electrolysis. ▪ Write soluble salt method. ▪ Calculate atom economy ▪ Identify improvements for the required practicals.		Skim and Scan of source information Decoding terms Etymology of key terms
		
		Baseline Recall questions to start every lesson End of unit assessment
		Revision Card preparation for every lesson Repetition of use of revision cards for end of unit assessment Exam questions - application