

OREL VINE SCHOOL

Course Outlines

Year 8

Cambridge Science

CHEMISTRY

<i>Term I</i>		<i>Term II</i>		<i>Term III</i>	
<i>Topic/Subtopic</i>	<i>Contents</i>	<i>Topic/Subtopic</i>	<i>Contents/Objectives</i>	<i>Topic/Subtopic</i>	<i>Contents/Objectives</i>
Unit 8.1 <i>Gases</i> (12 hours)	<ul style="list-style-type: none"> • 8Cm.04 Know that purity is a way to describe how much of a specific chemical is in a mixture. • 8Pf.06 Use particle theory to explain pressures in gases and liquids (qualitative only). • 8Pf.07 Describe the diffusion of gases and liquids as the intermingling of substances by the movement of particles • 8Pf.05 Explain that pressure is caused by the action of a force, exerted by a substance, on an area (pressure = force / area). 	Unit 8.2 <i>Liquids</i> (8 hours)	<ul style="list-style-type: none"> • 8Pf.06 Use particle theory to explain pressures in gases and liquids (qualitative only). • 8Pf.05 Explain that pressure is caused by the action of a force, exerted by a substance, on an area (pressure = force / area) • 8Cm.04 Know that purity is a way to describe how much of a specific chemical is in a mixture • 8Cp.01 Understand that the concentration of a solution relates to how many particles of the solute are 	Unit 8.5 <i>Atomic structure and chemical reactions</i> (10 hours)	<ul style="list-style-type: none"> • 8Cm.01 Describe the Rutherford model of the structure of an atom. • 8Cm.02 Know that electrons have negative charge, protons have positive charge and neutrons have no charge • 8Cm.03 Know that the electrostatic attraction between positive and negative charge is what holds together individual atoms. • 8Cc.03 Describe the reactivity of metals (limited to sodium, potassium, calcium, magnesium, zinc, iron, copper, gold and silver) with

			<p>present in a volume of the solvent.</p> <ul style="list-style-type: none"> • 8Pf.07 Describe the diffusion of gases and liquids as the intermingling of substances by the movement of particles. • 8Cc.05 Describe how the solubility of different salts varies with temperature. • 8Cp.02 Describe how paper chromatography can be used to separate and identify substances in a sample. 		<p>oxygen, water and dilute acids.</p> <ul style="list-style-type: none"> • 8Cc.01 Use word equations to describe reactions. • 8Cc.04 Know that reactions do not always lead to a single pure product and that sometimes a reaction will produce an impure mixture of products. • 8Cc.06 Understand that some substances are generally unreactive and can be described as inert
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Resources

- Cambridge Lower Secondary Science Stage 8 Student's work book.
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- Cambridge Lower Secondary Science past papers
- LMS e-learning platform.

Methodology

- Discovery method
- Experimentation
- Field study
- Integration of Information technology (IT)
- Research work
- Use of primary and secondary data from various sources

Mode of assessment

- Daily exercises from the coursebook
- End of month tests
- End of unit tests set from Cambridge Lower Secondary Science Stage 8 past papers
- Mid - term & end of term assessments
- Quizzes and assignments on the LMS
- Weekly homework assignments