The Ridgeway School & Sixth Form College

…Inspiring Learners For Their Future

*'Our shared vision is that our students, colleagues and families will be part of a **FAIR** community.*

*We will support our school **Family** to **Achieve** their potential, and **Inspire** students to **Reach** the very best destinations.'*

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Chemistry

Curriculum Overview

RESPECT | HONESTY | ENDEAVOUR | CREATIVITY | COMMUNITY

Year 7 Science Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	• Biology- Living things 1 • Chemistry- Particles 1	• Biology-Living things 1 • Chemistry- Particles 1	• Chemistry- Properties and reactions 1 • Physics-Energy and Waves 1	• Chemistry- Properties and reactions 1 • Physics- Energy and Waves 1	• Biology-Our Environment 1 • Physics-Forces and Electricity 1	• Biology-Our Environment 1 • Physics-Forces and Electricity 1

Year 8 Science Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 8	• Biology- Living things 2 • Chemistry- Particles 2	• Biology-Living things 2 • Chemistry- Particles 2	• Biology- Our Environment 2 • Physics-Energy and Waves 2	• Biology- Our Environment 2 • Physics-Energy and Waves 2	• Chemistry- Properties and reactions 2 • Physics-Forces and Electricity 2	• Chemistry-2 • Physics-Forces and Electricity 2

Year 9 Science Curriculum Overview-

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	• Biology- Living things 3 • Chemistry- 3	• Biology- Living things 3 • Chemistry- 3	• Biology- Our Environment 3 • Physics-Energy and Waves 3	• Biology- Our Environment 3 • Physics-Energy and Waves 3	• Chemistry-3 • Physics-Forces and Electricity 3	• Chemistry-2 • Physics-Forces and Electricity 3

Year 10 Chemistry Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 10	C1 Atomic structure C2 Periodic table	C3 Structure and bonding	C5 Chemical changes	C5 Chemical changes C6 Electrolysis	C7 Energy changes	C4 Chemical calculations

Year 11 Chemistry Curriculum Overview

Year 11	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Triple	C8 Rates and equilibrium	C8 Rates and equilibrium C9 Crude oils and fuels	C9 Crude oils and fuels *C10 Organic reactions*	C10 Organic reactions C11 Polymers C12 Chemical analysis	C13 The Earth's atmosphere C14 The Earth's resources C15 Using our resources	Revision
Combined	C8 Rates and equilibrium	C8 Rates and equilibrium C9 Crude oils and fuels	C9 Crude oils and fuels	C12 Chemical analysis	C13 The Earth's atmosphere C14 The Earth's resources	Revision

Sixth Form Chemistry Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	2.1 Atoms and reactions 4.1 Core organic chemistry	2.1 Atoms and reactions 4.1 Core organic chemistry	*4.2 Alcohols, haloalkanes and analysis* *2.2 Electrons, bonding and structure*	*4.2 Alcohols, haloalkanes and analysis* *2.2 Electrons, bonding and structure*	3.1 The periodic table and energy 3.2 Physical chemistry	3.1 The periodic table and energy 3.2 Physical chemistry 1.1 Practical skills and PAG focus but interweaved in every unit
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	5.1 Rates, equilibrium and pH 6.1 Aromatic compounds, carbonyls and acids	5.1 Rates, equilibrium and pH 6.1 Aromatic compounds, carbonyls and acids	*5.2 Energy* *6.2 Nitrogen compounds, polymers and synthesis*	5.3 Transitions metals *6.2 Nitrogen compounds, polymers and synthesis*	6.3 Analysis Revision & Exam preparation	

Applied Science Curriculum Overview

Extended Certificate

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	Unit 1: Principles and Applications of Science I • Biology • Chemistry • Physics	Unit 1: Principles and Applications of Science I • Biology • Chemistry • Physics	Unit 2: Practical Scientific Procedures and Techniques • Chromatography • Titrations *Unit 1 exams to take place in January*	Unit 2: Practical Scientific Procedures and Techniques • Chromatography • Titrations	Unit 2: Practical Scientific Procedures and Techniques • Calorimetry • Personal review	Unit 3: Science Investigative Skills • Plants • Electricity
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	Unit 3: Science Investigative Skills • Fuels • Diffusion	Unit 3: Science Investigative Skills • Enzymes • Electricity	Unit 9: Human Regulation and reproduction *Unit 3 exam takes place in January*	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction

National Diploma

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	Unit 8: Physiology of Human Body Systems	Unit 8: Physiology of Human Body Systems	Unit 5: Principles and Applications of Science II	Unit 5: Principles and Applications of Science II	Unit 5: Principles and Applications of Science II *Unit 5 exams to take place in May*	Unit 4: Laboratory Techniques and their Application
Year 13	**Term 1**	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**
	Unit 4: Laboratory Techniques and their Application	Unit 4: Laboratory Techniques and their Application	Unit 6: Investigative Project	Unit 6: Investigative Project	Unit 6: Investigative Project	Unit 6: Investigative Project