



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.'



Physics

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	<ul style="list-style-type: none"> • Biology- Living things 1 • Chemistry- Particles 1 	<ul style="list-style-type: none"> • Biology-Living things 1 • Chemistry- Particles 1 	<ul style="list-style-type: none"> • Chemistry- Properties and reactions 1 • Physics-Energy and Waves 1 	<ul style="list-style-type: none"> • Chemistry- Properties and reactions 1 • Physics- Energy and Waves 1 	<ul style="list-style-type: none"> • Biology-Our Environment 1 • Physics-Forces and Electricity 1 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Biology- Living things 2 • Chemistry- Particles 2 	<ul style="list-style-type: none"> • Biology-Living things 2 • Chemistry- Particles 2 	<ul style="list-style-type: none"> • Biology- Our Environment 2 • Physics-Energy and Waves 2 	<ul style="list-style-type: none"> • Biology- Our Environment 2 • Physics-Energy and Waves 2 	<ul style="list-style-type: none"> • Chemistry- Properties and reactions 2 • Physics-Forces and Electricity 2 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Biology- Living things 3 • Chemistry- 3 	<ul style="list-style-type: none"> • Biology- Living things 3 • Chemistry- 3 	<ul style="list-style-type: none"> • Biology- Our Environment 3 • Physics-Energy and Waves 3 	<ul style="list-style-type: none"> • Biology- Our Environment 3 • Physics-Energy and Waves 3 	<ul style="list-style-type: none"> • Chemistry-3 • Physics-Forces and Electricity 3 	<ul style="list-style-type: none"> • Chemistry-2 • Physics-Forces and Electricity 3

Year 10 Physics Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 10	Review from year 9: P3 Energy resources + P6 Molecules and matter from year 9	P2 Energy transfer by heating	P4 Electric Circuits	P5 Electric circuits in the home	P7 Radioactivity	P8 Forces
	P1 Conservation and dissipation of energy					

Year 11 Physics Curriculum Overview

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 11	Triple P8 Forces	Triple P9 Motion P10 Force and motion P11 Force and pressure	Triple P12 Wave properties P13 Electromagnetic waves P14 Light	Triple P14 light P15 electromagnetism P16 Space	Triple	Triple
	Combined P8 Forces	Combined P9 Motion P10 Force and motion	Combined P12 Wave properties P13 Electromagnetic waves	Combined P13 Electromagnetic waves P15 electromagnetism	Combined	Combined

Sixth Form Curriculum Overview

Physics

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	1.1 Practical skills 2.1 + 2.2 Quantities 3.1 Motion 3.2 Forces 4.4 Waves	3.3 Work, energy and power 4.5 Quantum Unit 4.1 Charge and current	3.4 Materials 4.2 EMF	3.5 Newtons Laws 4.3 Electrical Circuits	Consolidation of Practical activity endorsement Revision for EoY exams	5.5 Astrophysics 6.5 Medical imaging
Year 13	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	5.1 Thermal Physics 6.1 Capacitors	5.2 Circular motion 6.2 Electric fields	5.3 oscillations 6.3 Electromagnetism	5.4 Gravitational fields 6.4 Nuclear and particle physics	REVISION & Exam preparation	

Applied Science Curriculum Overview

Extended Certificate

Year 12	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Unit 1: Principles and Applications of Science I <ul style="list-style-type: none"> • Biology • Chemistry • Physics 	Unit 1: Principles and Applications of Science I <ul style="list-style-type: none"> • Biology • Chemistry • Physics 	Unit 2: Practical Scientific Procedures and Techniques <ul style="list-style-type: none"> • Chromatography • Titrations <i>Unit 1 exams to take place in January</i>	Unit 2: Practical Scientific Procedures and Techniques <ul style="list-style-type: none"> • Chromatography • Titrations 	Unit 2: Practical Scientific Procedures and Techniques <ul style="list-style-type: none"> • Calorimetry • Personal review 	Unit 3: Science Investigative Skills <ul style="list-style-type: none"> • Plants • Electricity
Year 13	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Unit 3: Science Investigative Skills <ul style="list-style-type: none"> • Fuels • Diffusion 	Unit 3: Science Investigative Skills <ul style="list-style-type: none"> • Enzymes • Electricity 	Unit 9: Human Regulation and reproduction <i>Unit 3 exam takes place in January</i>	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction	Unit 9: Human Regulation and reproduction

National Diploma

Year 12	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	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 <i>Unit 5 exams to take place in May</i>	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