

Long Term Curriculum Plan: Physics

At Bournemouth School, the science curriculum aims to inspire a future generation of scientists, igniting curiosity and wonder in students and developing their understanding of the world around them. Practical activities are used regularly to support theoretical application of knowledge and to develop research and analytical skills. High quality teaching provides purposeful, stimulating lessons, providing a rich depth of knowledge, enabling students to become critical thinkers and contribute to shaping a better world.

Our aim in Physics is to develop well-rounded Physicists who can explain complex ideas and are confident using mathematical skills to solve intricate problems. We develop students' ability to apply these ideas to investigate the world around them, both theoretically and practically. Throughout the curriculum, students are provided with opportunities to develop practical and investigative skills. Our curriculum aims to challenge all students and facilitates further studies or potential careers in the subject.

“About 13.5 billion years ago, matter, energy, time and space came into being in what is known as the Big Bang. The story of these fundamental features of our universe is called Physics.”

Yuval Noah Harari

KS4 roadmap	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	P1 Energy	P1 Energy	P3 Particle model of matter	P5a Forces	P5a Forces	P8 Space Physics
Year 10	P2 Electricity	P2 Electricity	P6 Waves	P6 Waves Revision	P5b Forces Part 2	P5b Forces Part 2
Year 11	Revision 1 - Paper 2 P7 Magnetism and Electromagnetism	Revision 1 - Paper 2 P7 Magnetism and Electromagnetism Formal Assessments	Revision 2 - Paper 1 P4 Atomic structure Formal Assessments Review	P4 Atomic Structure Revision Formal Assessments	Revision Formal Assessments Review	

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KS4 assessments

Year 9	Topic	Year 10	Topic	Year 11	Topic
w/c 16/10/23	P1 Energy Lessons 1-10 only	w/c 09/10/23	P2 Electricity lessons 1-8 only P5a Forces	w/c 16/10/23	P5b Forces P8 Space physics P7 Magnetism and electromagnetism lessons 1-8 only
w/c 27/11/23	P1 Energy Lessons 1-18 only	w/c 11/12/23	P1 Energy P2 Electricity	w/c 20/11/23	Mock Paper 2
w/c 26/02/23	P1 Energy P3 Particle model of matter	w/c 04/03/23	P6a Waves	w/c 4/03/23	Mock paper 1
w/c 07/05/23	P3 Particle model of matter P5a Forces	w/c 29/04/23	P1 Energy P2 Electricity P3 Particle model P5a Forces P6a + 6b Waves		
w/c 08/07/23	P1 Energy P3 Particle model of matter P5a Forces P8 Space physics	w/c 08/07/23	P5a Forces P5b Forces P6a + 6b Waves		

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Sixth form roadmap	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
YEAR 12	Induction Chapter 1 – Matter and radiation Chapter 2 – Quarks and leptons	Chapter 2 – Quarks and leptons Chapter 3 – Quantum phenomena	Chapter 11 - Materials Chapter 4 - Waves	Chapter 4 - Waves Chapter 5 - Optics	Chapter 5 - Optics Revision Year 12 Exam	Chapter 5 - Optics Chapter 19 – Thermal physics Year 12 Review
	Induction Chapter 6 – Forces in equilibrium	Chapter 6 – Forces in equilibrium Chapter 7 – On the move Chapter 8 – Newton’s laws of motion	Chapter 10 – Work, energy and power	Chapter 9 – Force and momentum Chapter 12 – Electric current	Chapter 12 – Electric current Revision Year 12 Exam	Chapter 13 – DC circuits Chapter 17 – Motion in a circle
YEAR 13	Chapter 20 - Gases	Chapter 26 - Radioactivity Chapter 27 – Nuclear energy Chapter 28 – Option topics Most doing 28.4 – Turning points in physics	Chapter 28 – Option topics Revision Formal Assessment 1 Review Formal Assessment 1	Chapter 28 – Option topics Formal Assessment 2	Review Formal Assessment 2 Revision	
	Chapter 18 – Simple harmonic motion Chapter 21 – Gravitational fields	Chapter 22 – Electric fields Chapter 24 – Magnetic fields	Chapter 25 – Electromagnetic induction Revision Formal Assessment 1 Review Formal Assessment 1	Chapter 25 – Electromagnetic induction Chapter 23 - Capacitors Formal Assessment 2	Review Formal Assessment 2 Revision	