

## Physics Combined Science Route

(P) Big ideas	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Energy</b>	P7.4 Energy Stores and Transfers (6 hours) 7Ia, 7Ib, 7Ic, 7Id, 8K	P8.3 Sound (9 hours) 7La, 7Lb, 7Lc, 7Ld, 7Le	P9.2 Heat Energy Transfer (6 hours) 8Ka, 8Kb, 8Kc GCSE topic 3 (3.9, 3.10) (paper 1) GCSE topic 14 (14.10) (paper 2)	P10.1 Using Reflection and Refraction (10 hours) GCSE topic 4 (4.10) (paper 1)	P11.1 Using Electromagnetic Waves ( 10 hours) GCSE topic 5 (5.7- 5.14, 5.20- 5.24 ) (paper 1)
	P7.5 Understanding Waves (4 hours) 7Le,	P8.2 Light (8 hours) 8Ja, 8Jb, 8Jc	P9.3 Energy and Efficiency ( 8 hours) 7Ib, 7Ie GCSE Topic 3 (3.1- 3.14) (paper 1)		
			P9.5 waves and the Electromagnetic Spectrum (6 hours) 8Ja, 8Jb, 8Jc, 7a, 7b, 7c, 7d, 7e, 7Le, 9Kd  GCSE topic 4 (4.1 – 4.7, 4.10– 4.11, 4.17, 5.13) (paper 1)		
<b>Forces and Fields</b>	P7.2 Different Forces (8 hours) 7Ka, 7Kc, 7Ke, 7Kb	P8.5 The Earth and Space (6 hours) 8La, 8Lb, 8Ld, 9Ja	P9.4 Describing Motion (6 hours ) 9Ic GCSE topic 2(2.1- 2.13) (paper 1)	P10.4 Forces and Work done (10 hours) GCSE topic 8 (8.1-8.15) (paper 2)	P11.4 Movement ( 12 hours) GCSE topic 2 (2.14- 2.21, 2.23-2.31) (paper 1)
	P7.3 Pressure (4 hours) 7Kd, 8Ic, 7Ge				
	P7.6 Current electricity (6 hours) 7Ja, 7jb, 7Jc, 7Je	P8.6 Magnets and Electromagnets (6 hours) 8Lc, 9Je	P9.6 Forces and Matter (6 hours) 7Kb, GCSE topic 15 (15.1 – 15.6) (paper 2)	P10.2 Using Electricity (12 hours) GCSE Topic 10 (10.1- 10.42) (paper 2)	P11.3 Electromagnetic Effects (12 hours)  GCSE topics 12 (12.1- 12.13) (Paper 2) GCSE topics 13 (13.2, 13.5, 13.6, 13.8-13.10) (paper 2)
	P8.4 Static Electricity (3 Hours) 9Jb				
<b>Matter and Materials</b>	P7.1 Measuring Density (4 hours) 8Ia	P8.1 Solids Liquids and Gasses (8 hours) 8Ia, 8Ib	P9.1 Describing Atoms ( 6 hours) 9Le GCSE topic 6 (6.1 – 6.9, 6.17) (paper 1)	P10.3 Particles and Gasses (12 hours) GCSE topic 14 (14.12-14.15) (paper 2)	P11.2 Radioactivity (8 hours) GCSE topic 6 (6.12- 6.32) (paper 1)

Physics Separate Science Route

(SP) Big ideas	Year 7	Year 8	Year 9	Year 10	Year 11
<b>Energy</b>	P7.4 Energy Stores and Transfers (6 hours) 7Ia, 7Ib,7Ic,7Id, 8K	P8.3 Sound (9 hours) 7La, 7Lb, 7Lc, 7Ld, 7Le	P9.2 Heat Energy Transfer (6 hours) 8Ka, 8Kb, 8Kc GCSE topic 3 (3.9, 3.10) (paper 1) GCSE topic 14 (14.10) (paper 2)	P10.1 Using Reflection and Refraction (10 hours) GCSE topic 4 and topic 5 (4.8,4.10, 4.13, 4.14, 5,1, 5.4, 5.5,5.6) (paper 1)	P11.1 Using Electromagnetic Waves (10 hours) GCSE topic 5 (5.7-5.24) (paper 1)
			P9.3 Energy and Efficiency ( 8 hours) 7Ib, 7Ie GCSE Topic 3 (3.1- 3.14) (paper 1)		
	P7.5 Understanding Waves (4 hours) 7Le,	P8.2 Light (8 hours) 8Ja, 8Jb, 8Jc	P9.5 Waves and the Electromagnetic Spectrum (8 hours) 8Ja, 8Jb, 8Jc, 7a, 7b,7c,7d, 7e, 7Le, 9Kd  GCSE topic 4 and 5 (4.1 – 4.7, 4.9– 4.12,4.16 4.17, 5.1 5.3, 5.13) (paper 1)		
<b>Forces and Fields</b>	P7.2 Different Forces (8 hours) 7Ka,7Kc,7Ke,7Kb	P8.5 The Earth and Space (6 hours) 8La, 8Lb, 8Ld, 9Ja	P9.4 Describing Motion (6 hours ) 9Ic GCSE topic 2(2.1- 2.13) (paper 1)	P10.4 Forces and Work done (10 hours) GCSE topic 8 (8.1-8.15) (paper 2)	P11.4 Movement ( 12 hours) GCSE topic 2 (2.14- 2.31) (paper 1)
	P7.3 Pressure (4 hours) 7Kd, 8Ic, 7Ge				
	P7.6 Current electricity (6 hours) 7Ja, 7jb, 7Jc,7Je	P8.6 Magnets and Electromagnets (6 hours) 8Lc, 9Je	P9.6 Forces and Matter (6 hours) 7Kb, 8Ic, 8Id GCSE topic 15 (15.1 – 15.17) (paper 2)	P10.2 Using Electricity (12 hours) GCSE Topic 10 (10.1- 10.42) (paper 2)	P11.3 Electromagnetic Effects (12 hours)  GCSE topics 12 (12.1- 12.14) (paper 2) GCSE topics 13 (13.1- 13.11) (paper 2)
	P8.4 Static Electricity (3 Hours) 9Jb	P10.5 Astronomy (10 hours) GCSE topic (P7.1 – 7.19) (paper 2)			
<b>Matter and Materials</b>	P7.1 Measuring Density (4 hours) 8Ia	P8.1 Solids Liquids and Gasses (8 hours) 8Ia, 8Ib	P9.1 Describing Atoms ( 6 hours) 9Le GCSE topic 6 (6.1 – 6.9, 6.17) (paper 1)	P10.3 Particles and Gasses (12 hours) GCSE topic 14 (14.12-14.20) (paper 2)	P11.2 Radioactivity (10 hours)  GCSE topic 6 (6.12- 6.35) (paper 1)
					P11.5 Nuclear Physics (6 hours) GCSE topic 6 (6.36- 6.46)