

KS5 Curriculum Sequencing – Homework/Prep Time Work and Private Study Work: Physics A

Level

A Level Physics homework, prep time work and private study work policy

All homework, prep time work and private study work in A Level Physics is set on Edulink homework with a clear set date, due date and time allocation in order to meet the recommended Sixth Form requirement of 8-9 hours of homework/prep time work and/or private study work for the course each fortnight.

Homework	4 hours of homework will be set for each student across both sides of the course every fortnight. This will be approximately 2 hours from each teacher. Homework could include textbook questions, worksheets, writing-up experiments, Thinking Bigger tasks, past-paper questions or Key Homeworks. These will all be checked for completion and peer-marked in lesson (if not self-marked as part of the homework itself).
Prep time work	2 hours of prep time work will be set for A Level Physics per fortnight. Prep work will take the form of students reading through pages in the textbook for a future topic, writing summary notes, answering the questions and marking the questions. This work will be checked for completion.
Private study work	<p>3 hours of private study work will be set each fortnight across both sides of the course.</p> <p>2 hours of this will take the form of 2 sets of questions to be completed on the Isaac Physics website (one for each half of the course).</p> <p>1 hour of this will be student's choice. They may use the hour to:</p> <ul style="list-style-type: none">-complete homework that requires more time-complete experimental write-ups that require more time-completing wider-reading around the subject-watching relevant physics documentaries/videos-working on their weak areas-any other useful or relevant piece of study <p>This final hour of study will not be checked for completion, unless it takes the form of completing homework/write-ups.</p>

Sequencing of homework, prep time work and private study work

Y12 Course Plan 22-23			Teacher A								Teacher B								
Week Comm.	Wk No.	Sch Wk	Section	Lesson Topic	Hwk	Ass.	IP	Prep.	TBT	Prac.	Section	Lesson Topic	Hwk	Ass.	IP	Prep.	TBT	Prac.	
05/09/22	1	A	2.1	Entrance test Recap/assessment lesson	Y	Ent. test	Y				4.1	Introduction/marking summer work Circuit components	Y			4.1.3			
12/09/22	2	B		Physical quantities and units Systematic errors and random errors	Y			2.1.5				Electric charge and current Electron drift velocity	Y	4.1 KH	Y				
19/09/22	3	A		Precision and accuracy Absolute and percentage uncertainties	Y		Y		2.1			Recap/assessment lesson Recap/assessment lesson	Y	4.1 KT		Rev			
26/09/22	4	B		Graphical treatment of uncertainties Scalar and vector quantities	Y			2.2.3			4.2	Recap/assessment lesson P.d and e.m.f	Y		Y		4.1		
03/10/22	5	A		Scalar and vector calculations Resolving vectors	Y		Y		2.2			Resistance and Ohm's Law Resistance of circuit components	Y			4.2.4			
10/10/22	6	B		Recap/assessment lesson Recap/assessment lesson	Y	2 KH		Rev				Practical lesson Resistivity	Y		Y			PAG 3.2	
17/10/22	7	A	3.1	Recap/assessment lesson Definitions in kinematics	Y	2 KT	Y					Practical lesson Effect of temperature on resistivity	Y			4.2.7	4.2	PAG 3.1	
Half-Term																			
31/10/22*	8	B		Graphs of motion Constant acceleration equations	Y			3.1.4				Electrical power Cost of electrical energy	Y	4.2 KH	Y				
07/11/22	9	A		Free fall and projectile motion Measurement of g	Y		Y					Recap/assessment lesson Recap/assessment lesson	Y	4.2 KT		Rev			
14/11/22	10	B		Practical lesson Practical lesson	Y			3.1.6		PAG 1.1	4.3	Recap/assessment lesson Kirchoff's first and second laws	Y		Y				
21/11/22	11	A		Car stopping distances Recap/assessment lesson	Y	3.1 KH	Y					Series circuits Parallel circuits	Y			4.3.4			
28/11/22	12	B		Recap/assessment lesson Recap/assessment lesson	Y	3.1 KT		Rev				The potential divider Practical lesson	Y		Y		4.3	PAG 4.1	
05/12/22	13	A	3.2	Force and the newton Dynamics	Y		Y					Practical lesson Internal resistance	Y			4.3.7		PAG 4.3	
12/12/22	14	B		Drag and terminal velocity Practical lesson	Y			3.2.5		PAG 1.2		Circuit analysis 1 Circuit analysis 2	Y	4.3 KH	Y				
Christmas Holiday																			
02/01/23*	15	A		Equilibrium Turning forces	Y		Y		3.1			Recap/assessment lesson Recap/assessment lesson	Y	4.3 KT		Rev			
09/01/23	16	B		Centre of mass Density	Y			3.2.8			4.4	Recap/assessment lesson Wave motion	Y		Y				
16/01/23	17	A		Pressure Recap/assessment lesson	Y	3.2 KH	Y					Wave terminology Practical lesson	Y			4.4.3		PAG 5.3	
23/01/23	18	B		Recap/assessment lesson Recap/assessment lesson	Y	3.2 KT		Rev				Wave speed and equation Common properties of waves	Y		Y				
30/01/23	19	A	3.3	Work and the joule Conservation of energy	Y		Y		3.2			Electromagnetic waves Polarisation	Y			4.4.7			
06/02/23	20	B		Potential and kinetic energy Power and the watt	Y							Practical lesson Refraction of light	Y		Y			PAG 6.3	
Half-Term																			
20/02/23	21	A		Efficiency Recap/assessment lesson	Y	3.3 KH	Y					Total internal reflection Practical lesson	Y	4.4 KH		4.4.9		PAG 6.2	
27/02/23	22	B		Recap/assessment lesson Recap/assessment lesson	Y	3.3 KT		Rev				Recap/assessment lesson Interference	Y		Y				
06/03/23	23	A	3.4	Deformation of materials Hooke's law	Y		Y		3.3			Young's double-slit experiment Diffraction gratings	Y			4.4.12			
13/03/23	24	B		Young's Modulus Practical lesson	Y			3.4.4		PAG 2.1		Practical lesson Stationary waves	Y		Y		4.4	PAG 5.1	
20/03/23	25	A		Practical lesson Categorisation of materials	Y	3.4 KH	Y		3.4	PAG 2.2		Stationary wave experiments Stationary longitudinal waves	Y			Rev			
27/03/23	26	B		Recap/assessment lesson Recap/assessment lesson	Y	3.4 KT		Rev				Practical lesson Recap/assessment lesson	Y	4.4 KT	Y			PAG 5.2	
Easter Holiday																			
17/04/23*	27	A	3.5	Recap/assessment lesson Newton's laws of motion	Y		Y				4.5	Recap/assessment lesson The photon	Y			4.5.2			
24/04/23	28	B		Momentum Momentum, force and impulse	Y			3.5.4				Practical lesson The electronvolt	Y		Y		4.5	PAG 6.1	
01/05/23*	29	A		Elastic and inelastic collisions Recap/assessment lesson	Y	3.5 KH	Y		3.5			Photoelectric effect 1 Photoelectric effect 2	Y	4.5 KH		4.5.5			
08/05/23	30	B		Recap/assessment lesson Recap/assessment lesson	Y	3.5 KT		Rev				Wave-particle duality Recap/assessment lesson	Y	4.5 KT	Y				

15/05/23	31	A		Consolidation/practice/PAG catch-up Consolidation/practice/PAG catch-up	Y		Y			PAG 12.1		Recap/assessment lesson Recap/assessment lesson	Y					
22/05/23	32	B		Consolidation/practice/PAG catch-up Consolidation/practice/PAG catch-up	Y			5.5.1		PAG 12.1		Consolidation/practice/PAG catch-up Consolidation/practice/PAG catch-up	Y		Y			
Half-Term																		
05/06/23	33	A	5.5	Structure of the universe Star formation and lifecycle	Y		Y					6.5	X-rays Attenuation of X-rays	Y			6.5.4	PAG 12.2
12/06/23	34	B		Electromagnetic radiation from stars Wien's law and Stefan's law	Y			5.5.6					Computerised axial tomography (CAT) The gamma camera	Y		Y		PAG 12.2
19/06/23	35	A		Astronomical distances Doppler effect and red shift	Y		Y						Positron emission tomography (PET) Ultrasound	Y			6.5.7	
26/06/23	36	B		CMBR and cosmological principle Evolution of the universe	Y			5.5.9					Acoustic Impedance The Doppler effect	Y	6.5 KH	Y		
03/07/23	37	A		Dark matter and dark energy Recap/assessment lesson	Y	5.5 KH	Y						Recap/assessment lesson Recap/assessment lesson	Y	6.5 KT		Rev	
10/07/23	38	B		Recap/assessment lesson Recap/assessment lesson	Y	5.5 KT		Rev					Recap/assessment lesson Consolidation/practice/PAG catch-up	Y		Y		6.5
17/07/23	39	A		Consolidation/practice/PAG catch-up Consolidation/practice/PAG catch-up	Y		Y		5.5				Consolidation/practice/PAG catch-up Consolidation/practice/PAG catch-up	Y			6.2.1	
Summer Holiday																		

Key:

Hwk – Homework task

IP – Isaac Physics task

Prep. – Preparation work for future lesson (occasionally revision for tests)

TBT – Thinking Bigger task

Ass. – Formal assessment task (Key Homeworks and Key Tests)

Prac – Practical Activity Group (PAG) experiment