

**Unit Code:** J249/04

**Qual Name:** GCSE Physics A (Gateway)

**Qual Title:** P5-P8 and P9 Higher

Question Set	Q. No	Total Marks	AO	Spec Ref.	Topic	Question Subject, If required	Additional Notes/Comments	Maths	Practical Assessment
1	1ai	1	AO3	P8.2b	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier	Y	
1	1aii	1	AO3	P8.2b	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier	Y	
1	1aiii	2	AO3	P8.2a, P8.2b	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier	Y	
1	1bi	2	AO3	P8.2a, p8.2b	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1bii	2	AO3	P8.2a, P6.2 c/d, 8.2b	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1ci	1	AO1	P8.2d	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1cii	1	AO1	P8.2d	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1ciii	2	AO1	P8.2g, h	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1di	4	AO1, AO2	P8.2b, P3.2m	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier	Y	
1	1dii	1	AO2	P8.1a, P7.2c	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
1	1diii	1	AO2	P8.2a	Powering Earth	This question is about energy resources to produce electricity	Overlap with Foundation Tier		
2	1ai	1	AO1	P5.1a	Wave Behaviour	This question is about water waves and sound waves.		Y	Y
2	1aii	2	AO2	P5.1c	Wave Behaviour	This question is about water waves and sound waves.			Y
2	1aiii	2	AO1	P5.1k	Wave Behaviour	This question is about water waves and sound waves.			
2	1b	5	AO1, AO2, AO3	P5.1j + P2.1b	Wave Behaviour	This question is about water waves and sound waves.			Y
2	1c	3	AO1, AO2	5.1h	Wave Behaviour	This question is about water waves and sound waves.			

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3	1a ii	2	AO1, AO2, AO3	P5.2c	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses		Y	
3	1a ii	3	AO1, AO2, AO3	P5.2c	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses		Y	
3	1b	1	AO1	P5.2h	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses			
3	1c i	1	AO2	P5.2h	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses		Y	
3	1c ii	2	AO1	P5.2h	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses			
3	1d	6	AO1, AO2, AO3	P5.2g, h, i	The Electromagnetic Spectrum	This question is about electromagnetic waves and their uses	LoR Question		
4	1a	2	AO1	P6.2a	Uses and hazards	This question is about decay, uses and hazards of radioactivity.			
4	1b	2	AO2	P6.2a	Uses and hazards	This question is about decay, uses and hazards of radioactivity.			
4	1c	2	AO2	P6.2c	Uses and hazards	This question is about decay, uses and hazards of radioactivity.			
4	1d i	1	AO1	P6.1d	Radioactive Emissions	This question is about decay, uses and hazards of radioactivity.			
4	1d ii	1	AO1	P6.1b	Radioactive Emissions	This question is about decay, uses and hazards of radioactivity.			
4	1e i	2	AO2	P6.1e + P6.1g	Radioactive Emissions	This question is about decay, uses and hazards of radioactivity.		Y	
4	1e ii	2	AO2	P6.1e + P6.1g	Radioactive Emissions	This question is about decay, uses and hazards of radioactivity.		Y	
4	1e iii	2	AO2	P6.1e + P6.1g	Radioactive Emissions	This question is about decay, uses and hazards of radioactivity.		Y	
5	1a	1	AO3	P8.1e	Physics on the move	This question is about stopping distances		Y	
5	1b	3	AO1, AO2, AO3	P8.1e+f, P2.1g	Physics on the move	This question is about forces and motion		Y	Y
5	1c	2	AO3	P8.1e+f, P2.1g	Physics on the move	This question is about forces and motion		Y	Y
5	1d i	2	AO1, AO2	P7.1d+e, PM2.1iv	Work done	This question is about stopping distances		Y	
5	1d ii	2	AO1, AO2	P7.1a, b +c	Work done	This question is about forces and motion			

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5	1diii	3	AO1, AO2	P7.1d, P2.1iv	Work done	This question is about forces and motion		Y	
5	1e	2	AO3	P8.1f	Physics on the move	This question is about stopping distances		Y	Y
6	1a	3	AO1, AO2	P7.1d	Work done	This question is about electrical power and energy transfer	Overlap with Foundation Tier	Y	
6	1b	3	AO1, AO2	P7.2c, P3.2m	Power and Efficiency	This question is about electrical power and energy transfer	Overlap with Foundation Tier	Y	
7	71a	2	AO3	P8.1e	Physics on the move	This question is about thinking and braking distances	Overlap with Foundation Tier	Y	
7	1bi	1	AO3	P8.1e	Physics on the move	This question is about thinking and braking distances	Overlap with Foundation Tier	Y	
7	1bii	3	AO1, AO2	P8.1d, P8.1e, P2.1h	Physics on the move	This question is about thinking and braking distances	Overlap with Foundation Tier	Y	
7	1ci	1	AO1	P8.1e	Physics on the move	This question is about thinking and braking distances	Overlap with Foundation Tier		
7	1cii	2	AO2	P8.1e	Physics on the move	This question is about thinking and braking distances	Overlap with Foundation Tier	Y	
7	1d	3	AO2, AO3	P7.1e, P8.1e, P8.1f	Work done	This question is about thinking and braking distances	Overlap with Foundation Tier	Y	
8	1a	2	AO1	P5.3c+d, P5.1g	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			Y
8	1b	2	AO1	P5.3c+d, P5.1g	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			Y
8	1ci	1	AO3	P5.3e	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			Y
8	1cii	1	AO3	P5.3e	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			Y
8	1di	1	AO2	P5.3e	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			
8	1dii	1	AO2	P5.3e	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			

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8	1ei	1	AO1	P5.3a, P5.3b, P5.3c	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			Y
8	1eii	1	AO2	P5.3c	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			
8	1eiii	2	AO3	P5.3c	Wave Interaction	This question is about ray diagrams and the transmission and absorption of colour			
9	1aai	1	AO1	P6.2e	Uses and Hazards	This question is about fission and fusion			
9	1aai	1	AO2	P8.3c	Beyond Earth	This question is about fission and fusion			
9	1bi	1	AO3	P6.2d, P6.2e	Uses and Hazards	This question is about fission and fusion			
9	1bii	1	4	P6.2d, P6.2e	Uses and Hazards	This question is about fission and fusion			
9	1c	2	5	P8.2a	Powering Earth	This question is about fission and fusion			
10	1a	2	AO1	P5.2j, P8.2g	High voltage energy transfer	This question is about high voltage energy transfer			
10	1b	2	AO1	P8.2e, P8.2c	High voltage energy transfer	This question is about high voltage energy transfer			
10	1c	5	AO1, AO2	P8.2e, P3.2m	High voltage energy transfer	This question is about high voltage energy transfer		Y	
11	1ai	1	AO3	P8.1e, P2.1f	Physics on the move	This question is about the stopping a moving car.			
11	1aai	2	AO1	P8.1e, P2.1f, P2.1e	Physics on the move	This question is about the stopping a moving car.		Y	
11	1bi	1	AO1	P8.1d	Physics on the move	This question is about the stopping a moving car.			Y
11	1bii	1	AO1	P8.1d	Physics on the move	This question is about the stopping a moving car.			Y
11	1ci	2	AO2	P7.1b	Work done	This question is about the stopping a moving car.			
11	1cii	1	AO2	P7.1b, P8.1e	Work done	This question is about the stopping a moving car.			
12	1	6	AO2, AO3	P8.3i, P5.2i, P1.3i	Beyond Earth	This question is about seismic waves	LoR Question		
13	1a	2	AO2	P6.1j+k	Radioactive Emissions	This question is about radioactive half-life		Y	

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13	1b	2	AO2	P6.1j+k	Radioactive Emissions	This question is about radioactive half-life		Y	
13	1c	2	AO2	P6.1j	Radioactive Emissions	This question is about radioactive half-life			
14	1ai	1	AO1	P5.1j, P2.1b	Wave Behaviour	This question is about the determination to measure the speed of sound		Y	Y
14	1aii	4	AO1, AO2	P5.1j, P2.1b	Wave Behaviour	This question is about the determination to measure the speed of sound		Y	Y
14	1aiii	2	AO3	P5.1j	Wave Behaviour	This question is about the determination to measure the speed of sound			Y
14	1b	3	AO2	P5.1g, P5.2i	Wave Behaviour	This question is about the determination to measure the speed of sound			
15	1a	1	AO2	5.1e	Wave Behaviour	This question is about waves	Overlap with Foundation Tier		
15	1bi	2	AO1	5.1a	Wave Behaviour	This question is about waves	Overlap with Foundation Tier		
15	1bii	3	AO1, AO2	5.1d	Wave Behaviour	This question is about waves	Overlap with Foundation Tier	Y	
15	1c	3	AO1, AO2	5.1g	Wave Behaviour	This question is about waves	Overlap with Foundation Tier		
15	1d	3	AO1	5.2g,h	The Electromagnetic Spectrum	This question is about waves	Overlap with Foundation Tier		
16	1a	2	AO2	7.1d	Work done	This question is about energy transfers.	Overlap with Foundation Tier	Y	
16	1b	2	AO3	7.2d	Power and Efficiency	This question is about energy transfers.	Overlap with Foundation Tier		
17	1a	1	AO3	6.2c	Uses and Hazards	This question is about the uses of nuclear radiations			
17	1b	2	AO3	6.2c	Uses and Hazards	This question is about the uses of nuclear radiations			
17	1c	2	AO2	6.2c	Uses and Hazards	This question is about the uses of nuclear radiations			
18	1	6	AO1, AO3	8.3a, b	Beyond Earth	This question is about decay, uses and hazards of radioactivity.	LoR Question		
19	1a	1	AO3	7.1d	Work done	This question is about conservation of energy and efficiency			Y
19	1b	2	AO3	7.2d	Power and Efficiency	This question is about conservation of energy and efficiency			Y
19	1c	2	AO1, AO2	7.1a	Work done	This question is about conservation of energy and efficiency			Y
20	1a	4	AO1, AO2	P7.1d	Work done	This question is about specific heat capacity and efficiency		Y	
20	1b	4	AO1, AO2	P7.2d	Power and Efficiency	This question is about specific heat capacity and efficiency		Y	
21	1a	3	AO1	8.3e	Beyond Earth	This question is about Satellites			

Question Set	Q.	Total Marks	AO	Spec Ref.	Topic	Question Subject, If required	Additional Notes/Comments	Maths	Practical Assessment
21	1bi	2	AO1	8.3f	Beyond Earth	This question is about Satellites			
21	1bii	2	AO1	8.3g	Beyond Earth	This question is about Satellites			
22	1a	3	AO1	8.2c,d	Powering Earth	This question is about electrical power transmission			
22	1b	2	AO1, AO2	8.2f	Powering Earth	This question is about electrical power transmission		Y	
22	1ci	2	AO1, AO2	8.2f	Powering Earth	This question is about electrical power transmission			Y
22	1cii	2	AO2, AO3	8.2f	Powering Earth	This question is about electrical power transmission		Y	
23	1a	2	AO3	6.1i	Radioactive Emissions	This question is about a radioactivity experiment and the treatment of a brain cancer			Y
23	1b	3	AO3	6.1i	Radioactive Emissions	This question is about a radioactivity experiment and the treatment of a brain cancer			Y
23	1c	4	AO3	6.2c	Uses and Hazards	This question is about a radioactivity experiment and the treatment of a brain cancer			
24	1a	2	AO1, AO3	8.1f	Physics on the move	This question is about stopping distances			
24	1b	2	AO1, AO3	8.1i	Physics on the move	This question is about stopping distances		Y	
24	1c	2	AO2	8.1i	Physics on the move	This question is about stopping distances		Y	
24	1d	4	AO2	8.1e	Physics on the move	This question is about stopping distances			
25	1	1	AO1	5.1f	Wave Behaviour				
25	2	1	AO1	5.1g	Wave Behaviour				
25	3	1	AO1	5.1j	Wave Behaviour				Y
25	4	1	AO2	5.1g	Wave Behaviour				Y
25	5	1	AO1	5.3b	Wave Interaction				
25	6	1	AO2	5.1f	Wave Behaviour				
25	7	1	AO1	5.2b,g	The Electromagnetic Spectrum				
25	8	1	AO1	5.2h	The Electromagnetic Spectrum				
25	9	1	AO1	5.1b	Wave Behaviour				
26	1	1	AO1	6.2e	Uses and Hazards				
26	2	1	AO1	6.1b	Radioactive Emissions				

Question Set	Q.	Total Marks	AO	Spec Ref.	Topic	Question Subject, If required	Additional Notes/Comments	Maths	Practical Assessment
26	3	1	AO2	6.2e	Uses and Hazards				
26	4	1	AO2	6.1g	Radioactive Emissions				
26	5	1	AO2	6.1j	Radioactive Emissions				
26	6	1	AO2	6.1l	Radioactive Emissions				Y
26	7	1	AO1	6.1j	Radioactive Emissions			Y	
26	8	1	AO1	6.1h	Radioactive Emissions				
26	9	1	AO1	6.2c	Uses and Hazards				
26	10	1	AO1	6.1b	Radioactive Emissions				
27	1	1	AO2	7.2d	Power and Efficiency				
27	2	1	AO2	7.2e	Power and Efficiency				
27	3	1	AO1	7.2d	Power and Efficiency				
27	4	1	AO2	7.2d	Power and Efficiency			Y	
27	5	1	AO2	7.1d	Work Done			Y	
27	6	1	AO2	7.2d	Power and Efficiency			Y	
27	7	1	AO2	7.2e	Power and Efficiency			Y	
28	1	1	AO1	8.2c	Powering Earth				
28	2	1	AO1	8.2g	Powering Earth				
28	3	1	AO2	8.1i	Physics on the move				
28	4	1	AO1	8.3i	Beyond Earth				
28	5	1	AO1	8.1g	Physics on the move				
28	6	1	AO1	8.2g	Powering Earth				
28	7	1	AO1	8.1i	Physics on the move				
28	8	1	AO1	8.3f	Beyond Earth				
28	9	1	AO1	8.1e	Physics on the move			Y	Y
28	10	1	AO2	8.3g	Beyond Earth				
28	11	1	AO1	8.3a	Beyond Earth				
28	12	1	AO2	8.1h	Physics on the move			Y	
28	13	1	AO1	8.1a	Physics on the move				
28	14	1	AO1	8.2a	Powering Earth				
28	15	1	AO1	8.3a	Beyond Earth				
28	16	1	AO1	8.3d	Beyond Earth				
28	17	1	AO1	8.3f	Beyond Earth				
28	18	1	AO2	8.3f	Beyond Earth				
28	19	1	AO2	8.2f	Powering Earth			Y	