

Year 11 Revision Schedule 2023-24

Subject/Course:	GCSE Combined Science (Physics) - Higher Tier
Student Name:	

	Topic	Key knowledge/skills/questions	Resources/activities/links
Monday 15 January	Student-led approach: Your two weakest topics / subtopics on Paper 2 (identified by you as 'red' on your Paper 2 learning checklist) Core coverage: Waves I (6.6.1) – wave description and terminology, wave properties, wave equation, RP8 (Measurement of waves)	 Recall of core knowledge in topic Use and application of core knowledge Waves I: recall and use of wave terminology drawing and labelling diagrams of 	 'Red' topics – review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize

				 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Waves I: https://www.bbc.co.uk/bitesize/guides/zwkn2nb/revision/1 https://www.bbc.co.uk/bitesize/guides/z3yq4qt/revision/1 https://www.bbc.co.uk/bitesize/guides/zqnnh39/revision/1
Week 2	Monday 22 January	Student-led approach: Your next two weakest topics / sub-topics on Paper 2 (identified by you as 'red' on your Paper 2 learning checklist) Core coverage: Waves II (6.6.2) – types, properties and uses of EM waves, reflection and refraction, RP9 (refraction), production of radio waves, emission and absorption of IR, RP10 (Absorption of IR)	 Recall of core knowledge in topic Use and application of core knowledge Waves II: Recall names, typical frequencies and wavelengths of parts of the EM spectrum Know and describe uses and dangers of parts of the EM spectrum Explain why some EM waves are more suitable for communication than others Draw and label ray diagrams for reflection and refraction Describe production and reception of radio waves Understanding of Required Practical set up Describe how the nature of materials affects its absorption or emission of IR waves 	 Red' topics – review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk)

				 Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Waves II:
				https://www.bbc.co.uk/bitesize/guides/z2xjdxs/revision/1 https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1
2 Joom	Monday 29 January	Student-led approach: Your next two weakest topics / sub-topics on Paper 2 (identified by you as 'red' or 'amber' on your Paper 2 learning checklist) Core coverage: Forces I (6.5.1, 6.5.2, 6.5.3, 6.5.6 (part)) – weight, adding and subtracting forces, work done by a force, stretching and compression forces, energy stored by elastic material, RP6 (Force and extension), velocity and acceleration, motion graphs	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Forces I: Recall and use the equation to calculate weight Determine and describe the resultant force acting on an object Recall and use the equation to calculate work done Recall and use the equation to calculate the extension of an object caused by a force Recall and use the equation to calculate the energy stored in by an elastic object Understanding of Required Practical set up Recall and use the equations to calculate speed, acceleration (the 'suvat' equations) Draw and interpret distance-time graphs and velocity-time graphs Determine the gradient of graphs, 	 https://www.bbc.co.uk/bitesize/guides/zqnnh39/revision/1 'Red' topics - review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics - practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' - review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' - practice tasks:
			 including using the tangent method Understanding of Required Practical set up 	from, eg, revision work books • High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions

				from www physicsandmathstuter com and
				from www.physicsandmathstutor.com and
				<u>www.aqa.org.uk</u>
				BBC Bitesize links for Forces I:
				https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1
				https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1
				https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1
				https://www.bbc.co.uk/bitesize/guides/z9hk3k7/revision/1
				https://www.bbc.co.uk/bitesize/guides/z2wy6yc/revision/1
				https://www.bbc.co.uk/bitesize/guides/zc7q4qt/revision/1
		Student-led approach:		'Red' topics – review tasks:
	Monday 5	Your two weakest topics / sub-	Recall of core knowledge in topic	Relearn material using new sources, eg revision guide,
	February	topics on Paper 1 (identified	Use and application of core knowledge	BBC Bitesize
	i coi aai y	by you as 'red' on your Paper 1	ose and application of core knowledge	 Compile knowledge organiser, using your class notes,
		, , ,		
		learning checklist)		revision guides, textbooks, BBC Bitesize (see
				www.hayestl.com for knowledge organiser tips)
		Core coverage:		Add to your lesson notes using revision guides,
		Energy (6.1.1, 6.1.2, 6.1.3) –	Energy:	textbooks, BBC Bitesize
		energy stores and transfers,	Recall the eight energy stores	
		conservation of energy,	Recall the four energy pathways	'Red' topics – practice tasks:
		thermal energy transfer, RP1	Describe energy transfers between	 Low demand knowledge checking questions from, eq,
		(specific heat capacity) RP2	objects in terms of systems, stores and	revision guide or textbooks or the relevant topics from
		(thermal insulation), power,	pathways	Www.educake.co.uk
		,,,,		www.educake.co.uk
		efficiency, energy resources,	Understanding energy transfers in the	
4		choices about energy resources	context of conservation of energy	'Core coverage' – review tasks:
2			Describe methods for reducing wasted	Cornell notes successive summarisation of topics (see
9			energy transfers	www.hayestl.com for Cornell notes tips)
Week			Recall and use the equations to calculate	 Mind maps linking concepts and knowledge within the
			efficiency	topic and with other topics (see www.hayestl.com for
			Recall and use the equations to calculate	mind mapping tips)
			power	 Elaboration and extension of notes, using other sources,
			Recall and use the equation to calculate	eg, revision guides, textbooks, BBC Bitesize
				eg, revision guides, textbooks, DDC bitesize
			the energy stored in by a moving object	ICana assumed mustica trades
			Recall and use the equation to calculate	'Core coverage' – practice tasks:
			the change in energy stored by an	Low demand knowledge checking questions (eg, from
			object moving vertically in a	revision guide or textbooks or the relevant topics from
			gravitational field	Www.educake.co.uk)
			Recall and use the equation to calculate	Medium demand knowledge and application questions
			the energy stored in by an elastic object	from, eg, revision work books
			 Recall and use the equation to calculate 	 High demand knowledge, application and analysis
			the change in temperature of an object	questions from, eg, revision workbooks; exam questions
			, , , , , , , , , , , , , , , , , , , ,	
			due to a change in the thermal energy	from www.physicsandmathstutor.com and
			stored by the object	<u>www.aqa.org.uk</u>

			Understanding of Required Practical set	1
			 Identify renewable and non-renewable energy resources Explain choices in use of energy resources by countries 	BBC Bitesize links for Energy: https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/1 https://www.bbc.co.uk/bitesize/guides/zp8jtv4/revision/1 https://www.bbc.co.uk/bitesize/guides/z2gjtv4/revision/1 https://www.bbc.co.uk/bitesize/guides/zchgdxs/revision/1 https://www.bbc.co.uk/bitesize/guides/z3nktv4/revision/1
Week 5	Half Term Monday 12 February	Student-led approach: Your next two weakest topics / sub-topics on Paper 1 (identified by you as 'red' on your Paper 1 learning checklist) Core coverage: Particle Model (6.3.1, 6.3.2, 6.3.3) – density, changes in state, RP5 (Density), internal energy, specific heat, latent heat, cooling / heating curves, gas pressure and temperature	 Recall of core knowledge in topic Use and application of core knowledge Particle Model: Recall and use the equation to calculate density Convert between units of different magnitude Describe states of matter in terms of particle arrangement, energy and properties Describe changes of state in terms of changes in particle energy and attraction Understanding energy transfers in the context of conservation of energy Recall and describe the components of internal energy Understand how the components of energy change during heating and changes of state Sketch, understand and interpret cooling and heating curves Describe and explain how the motion of gas particles gives rise to pressure exerted by a gas Describe and explain in terms of particle motion how changes to the temperature of a gas affects the pressure it exerts Understanding of Required Practical set up 	 Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision work books; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Particle Model:

				https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1 https://www.bbc.co.uk/bitesize/guides/zwwfxfr/revision/1 https://www.bbc.co.uk/bitesize/guides/z2xcfcw/revision/1 https://www.bbc.co.uk/bitesize/guides/zyjvtv4/revision/1
Week 6	Monday 19 February	Student-led approach: Your next two weakest topics / sub-topics on Paper 1 (identified by you as 'red' on your Paper 1 learning checklist) Core coverage: Electricity I (6.2.1, 6.2.2) – circuit symbols, charge, current, potential difference, resistance, RP3 (Factors affecting resistance), RP4 (Current-potential difference characteristics), series and parallel circuits, circuit rules	 Recall of core knowledge in topic Use and application of core knowledge Electricity I: Draw and interpret circuit diagrams using circuit symbols Define current, potential difference, resistance, power Recall and use the equation that links charge, current and time Recall and use the equation that links resistance, potential difference and current Describe and explain how resistance arises in circuit components Describe and explain the factors that affect resistance Identify and describe series and parallel sections of circuits Recall and use the 'circuit rules' to interpret circuit diagrams and make calculations Understanding of Required Practical set up 	 'Red' topics - review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics - practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' - review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' - practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Electricity I: https://www.bbc.co.uk/bitesize/guides/zqvq4qt/revision/1 https://www.bbc.co.uk/bitesize/guides/zqf6msg/revision/1

		Student-led approach:		'Red' topics – review tasks:
	Monday 26 February	Your two weakest topics / sub- topics on Paper 2 (identified by you as 'red' on your Paper 2 learning checklist)	 Recall of core knowledge in topic Use and application of core knowledge 	 Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips)
Week 7		Core coverage: Waves I (6.6.1) – wave description and terminology, wave properties, wave equation, RP8 (Measurement of waves).	 Waves I: recall and use of wave terminology drawing and labelling diagrams of transverse and longitudinal waves recall, use and application of wave equation understanding of Required Practical set up understanding and description of measurement techniques that reduce uncertainties and errors Knowledge and use of terms – resolution, accuracy, error, uncertainty 	 Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Waves I: https://www.bbc.co.uk/bitesize/guides/zwkn2nb/revision/1 https://www.bbc.co.uk/bitesize/guides/zayq4qt/revision/1 https://www.bbc.co.uk/bitesize/guides/zaynnh39/revision/1
Week 8	Monday 4 March	Student-led approach: Your next two weakest topics / sub-topics on Paper 2 (identified by you as 'red' on your Paper 2 learning checklist)	 Recall of core knowledge in topic Use and application of core knowledge 	 'Red' topics – review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize

		Core coverage: Waves II (6.6.2) – types, properties and uses of EM waves, refraction, RP9 (refraction), production of radio waves, emission and absorption of IR, RP10 (Absorption of IR)	 Waves II: Recall names, typical frequencies and wavelengths of parts of the EM spectrum Know and describe uses and dangers of parts of the EM spectrum Explain why some EM waves are more suitable for communication than others Draw and label ray diagrams for refraction Describe production and reception of radio waves Understanding of Required Practical set up Describe how the nature of materials affects its absorption or emission of IR waves 	 Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision work books; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Waves II: https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1 https://www.bbc.co.uk/bitesize/guides/ztpm7p3/revision/1 https://www.bbc.co.uk/sitesize/guides/zqnnh39/revision/1
Week 9	Monday 11 March	Student-led approach: Your next two weakest topics / sub-topics on Paper 2 (identified by you as 'red' on your Paper 2 learning checklist) Core coverage:	 Recall of core knowledge in topic Use and application of core knowledge Forces I:	 'Red' topics – review tasks: Relearn material using new sources, eg revision guide, BBC Bitesize Compile knowledge organiser, using your class notes, revision guides, textbooks, BBC Bitesize (see www.hayestl.com for knowledge organiser tips) Add to your lesson notes using revision guides, textbooks, BBC Bitesize

		Forces I (6.5.1, 6.5.2, 6.5.3, 6.5.6 (part)) – weight, adding and subtracting forces, work done by a force, stretching and compression forces, energy stored by elastic material, RP6 (Force and extension), velocity and acceleration, motion graphs	 Recall and use the equation to calculate weight Determine and describe the resultant force acting on an object Recall and use the equation to calculate work done Recall and use the equation to calculate the extension of an object caused by a force Recall and use the equation to calculate the energy stored in by an elastic object Understanding of Required Practical set up Recall and use the equations to calculate speed, acceleration (the 'suvat' equations) Draw and interpret distance-time graphs and velocity-time graphs Determine the gradient of graphs, including using the tangent method Understanding of Required Practical set up 	 'Red' topics – practice tasks: Low demand knowledge checking questions from, eg, revision guide or textbooks or the relevant topics from Www.educake.co.uk 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk
				BBC Bitesize links for Forces I: https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1 https://www.bbc.co.uk/bitesize/guides/zskn2nb/revision/1 https://www.bbc.co.uk/bitesize/guides/z232k2p/revision/1 https://www.bbc.co.uk/bitesize/guides/z9hk3k7/revision/1 https://www.bbc.co.uk/bitesize/guides/z2wy6yc/revision/1 https://www.bbc.co.uk/bitesize/guides/zc7q4qt/revision/1
Week 10	Monday 18 March	Student-led approach: Your next two weakest topics / sub-topics on Paper 1 (identified by you as 'amber' on your Paper 1 learning checklist) Core coverage:	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Electricity II:	 'Amber' topics – review tasks: Blank page retrieval, followed by supplementary notes and links (see www.hayestl.com for blank page retrieval tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize Cornell notes successive summarisation of topics, including 'flash card' summary (see www.hayestl.com for Cornell notes tips)

		Electricity II (6.2.3, 6.2.4, 6.2.5) – direct and alternating current, safety in mains electricity systems, electric power and energy transfers in circuits, National Grid	 Describe differences between direct and alternating current Draw and label the connections in a UK mains plug Describe the operation of a fuse and a circuit breaker Identify safety measures in UK electricity supplies Define electric power Recall and use the equation that links power, current and potential difference Recall and use the equation that links power, current and resistance Describe the heating effect of current Describe the main features of the National Grid Explain the function of step-up and step-down transformers within the National Grid 	 Dual coding of key ideas or diagrams (see www.hayestl.com for dual coding tips) 'Amber' topics – practice tasks: Medium demand knowledge and application questions from, eg, revision work books Exam questions completed to time Exam paper and test paper question analysis (TEEPEE model) 'Core coverage' – review tasks: Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize 'Core coverage' – practice tasks: Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Electricity II: https://www.bbc.co.uk/bitesize/guides/zw8n2nb/revision/1 https://www.bbc.co.uk/bitesize/guides/zqf6msg/revision/1
Week 11	Monday 25 March	Student-led approach: Your next two weakest topics / sub-topics on Paper 1 (identified by you as 'amber' on your Paper 1 learning checklist) Core coverage:	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Atomic structure:	 Amber' topics – review tasks: Blank page retrieval, followed by supplementary notes and links (see www.hayestl.com for blank page retrieval tips) Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize Cornell notes successive summarisation of topics, including 'flash card' summary (see www.hayestl.com for Cornell notes tips)

		Atomic Structure (6.4.1, 6.4.2, 6.4.3) – structure of the atom, development of atomic model, properties of nuclear radiation, nuclear decay equations, determining half-life, background radiation, contamination and irradiation	 Draw and label a diagram of an atom Describe the properties of electrons, protons and neutrons Describe the main points in the development of the atomic model Describe the plum pudding model, the 'gold foil scattering experiment' and why the latter caused a change our model of the atom Understand and describe the properties of alpha, beta and gamma radiation, particularly penetration and ionising power Draw and interpret half life graphs and data tables Determine half life from a graph Describe causes and consequences of background radiation, contamination and irradiation, and safety precautions when using radioactive materials Core coverage' – review tasks: Cornell notes successive summarisation of topics www.hayestl.com for Cornell notes tips) Elaboration and extension of notes, using other seg, revision guides, textbooks, BBC Bitesize Core coverage' – practice tasks: Low demand knowledge endeking questions (eg, revision guide or textbooks or the relevant topics www.educake.co.uk) Medium demand knowledge and application of topics www.hayestl.com mind mapping tips) Elaboration and extension of notes, using other seg, revision guides or textbooks or the relevant topics www.educake.co.uk) Medium demand knowledge and application questions (eg, revision guides, textbooks, BBC Bitesize in textbooks or the relevant topics www.educake.co.uk) Medium demand knowledge and application questions (eg, revision guides, textbooks, gexam questions from, eg, revision workbooks; exam questions fr	(see n the n for sources, from stions suestions
Week 12	Easter Monday 1 April	Student-led approach: Your next two weakest topics / sub-topics on Paper 2 (identified by you as 'amber' on your Paper 2 learning checklist)	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Amber' topics – review tasks: Blank page retrieval, followed by supplementary and links (see www.hayestl.com for blank page r tips) 	

Analysis of novel contexts Forces II: Recall and use Newton's laws of motion of describe scenarios involving forces Calculate braking distances and use concept of work to determine braking distances. Interpret stopping distance and thinking distance and the properties of the pr	Core coverage: Forces II (6.5.4, 6.5.5, 6.5.6 (part), 6.5.7) - Newton's laws of motion, RP7 (force and acceleration), braking Forces II: Recall and use Newton's laws of motion to describe scenarios involving forces concept of work to determine braking distances Interpret stopping distance and thinking distance graphs and data tables Understanding of Required Practical set up Interpret stopping distance and thinking distance and thinking distance graphs and data tables Understanding of Required Practical set up *Core coverage' - review tasks: Cornell notes successive summarisation of topics, including 'flash card' summary (see www.hayestl.com for Cornell notes tips) */amber' topics - practice tasks: Medium demand knowledge and application questions from, eg, revision work books Exam paper and test paper question analysis (TEEPEE model) *Core coverage' - review tasks: Cornell notes successive summarisation of topics, including 'flash card' summary (see www.hayestl.com for dual coding tips) */amber' topics - practice tasks: *Medium demand knowledge and application questions from, eg, revision work books Exam paper and test paper question analysis (TEEPEE model) *Core coverage' - review tasks: *Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) */amber' topics - practice tasks: *Cornell notes successive summarisation of value coding tips) */amber' topics - practice tasks: *Medium demand knowledge and test paper question analysis (TEEPEE model) *Core coverage' - review tasks: *Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes tips) **Maber' topics - practice tasks: *Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes successive summarisation of topics (see www.hayestl.com for Cornell notes successive summarisation of topics (see www
	from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Forces II: https://www.bbc.co.uk/bitesize/guides/zgv797h/revision/1

Week 13	M
Wee	

Monday 8 April

Student-led approach:
Your next two weakest topics /
sub-topics on **Paper 2**(identified by you as 'amber' on
your Paper 2 learning checklist)

Particle Model (6.3.1, 6.3.2, 6.3.3) – density, changes in state, RP5 (Density), internal energy, specific heat, latent heat, cooling / heating curves, gas pressure and temperature

- Recall of core knowledge in topic
- Use and application of core knowledge
- Application of knowledge to novel contexts
- Analysis of novel contexts

Particle Model:

- Recall and use the equation to calculate density
- Convert between units of different magnitude
- Describe states of matter in terms of particle arrangement, energy and properties
- Describe changes of state in terms of changes in particle energy and attraction
- Understanding energy transfers in the context of conservation of energy
- Recall and describe the components of internal energy
- Understand how the components of energy change during heating and changes of state
- Sketch, understand and interpret cooling and heating curves
- Describe and explain how the motion of gas particles gives rise to pressure exerted by a gas
- Describe and explain in terms of particle motion how changes to the temperature of a gas affects the pressure it exerts
 Understanding of Required Practical set up

Amber' topics – review tasks:

- Blank page retrieval, followed by supplementary notes and links (see www.hayestl.com for blank page retrieval tips)
- Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize
- Cornell notes successive summarisation of topics, including 'flash card' summary (see www.hayestl.com for Cornell notes tips)
- Dual coding of key ideas or diagrams (see <u>www.hayestl.com</u> for dual coding tips)

'Amber' topics – practice tasks:

- Medium demand knowledge and application questions from, eq, revision work books
- Exam questions completed to time
- Exam paper and test paper question analysis (TEEPEE model)

'Core coverage' – review tasks:

- Cornell notes successive summarisation of topics (see <u>www.hayestl.com</u> for Cornell notes tips)
- Mind maps linking concepts and knowledge within the topic and with other topics (see www.hayestl.com for mind mapping tips)
- Elaboration and extension of notes, using other sources, eg, revision guides, textbooks, BBC Bitesize

'Core coverage' – practice tasks:

- Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk)
- Medium demand knowledge and application questions from, eg, revision work books
- High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk

BBC Bitesize links for Particle Model:

https://www.bbc.co.uk/bitesize/guides/zqjy6yc/revision/1 https://www.bbc.co.uk/bitesize/guides/zwwfxfr/revision/1 https://www.bbc.co.uk/bitesize/guides/z2xcfcw/revision/1

				https://www.bbc.co.uk/bitesize/guides/zyjvtv4/revision/1
				inceps.//www.bbc.co.uk/ biccsize/ guides/ 24/1/CVISION/ I
		Student-led approach:		'Green' topics – review tasks:
	Monday 15 April	Your next two weakest topics /	Recall of core knowledge in topic	 Blank page retrieval, followed by supplementary notes
		sub-topics on Paper 1	Use and application of core knowledge	and links (see www.hayestl.com for blank page retrieval
		(identified by you as 'green' on	Application of knowledge to novel	tips)
		your	contexts	Elaboration and extension of notes, using other sources,
		Paper 1 learning checklist)	Analysis of novel contexts	eg, revision guides, textbooks, BBC Bitesize
			Linking and synthesis of knowledge	Cornell notes successive summarisation of topics,
			between topics	including 'flash card' summary (see www.hayestl.com for
				Cornell notes tips)Dual coding of key ideas or diagrams (see
		Core coverage:		www.hayestl.com for dual coding tips)
		Electricity I & II (6.2.1,	Electricity I & II:	g upo)
		6.2.2, 6.2.3, 6.2.4, 6.2.5) –	Draw and interpret circuit diagrams	'Green' topics – practice tasks:
		circuit symbols, charge,	using circuit symbols	High demand knowledge, application and analysis
		current, potential difference,	Define current, potential difference,	questions from, eg, revision workbooks; exam questions
		resistance, RP3 (Factors	resistance, power	from www.physicsandmathstutor.com and
4		affecting resistance), RP4 (Current-potential difference	Recall and use the equation that links charge, current and time	 www.aqa.org.uk Exam questions completed to time Exam paper and test paper question analysis (TEEPEE
c 14		characteristics), series and	Recall and use the equation that links	model)
Week		parallel circuits, circuit rules,	resistance, potential difference and	
×		direct and alternating current,	current	'Core coverage' – review tasks:
		safety in mains electricity	Describe and explain how resistance	Cornell notes successive summarisation of topics (see
		systems, electric power and	arises in circuit components	www.hayestl.com for Cornell notes tips)
		energy transfers in circuits, National Grid	Describe and explain the factors that	Mind maps linking concepts and knowledge within the
		National Grid	affect resistanceIdentify and describe series and parallel	topic and with other topics (see www.hayestl.com for mind mapping tips)
			sections of circuits	 Elaboration and extension of notes, using other sources,
			Recall and use the 'circuit rules' to	eg, revision guides, textbooks, BBC Bitesize
			interpret circuit diagrams and make	5, 1 1 5, 11 1, 11
			calculations	'Core coverage' – practice tasks:
			Understanding of Required Practical set	Low demand knowledge checking questions (eg, from
			up	revision guide or textbooks or the relevant topics from
			Describe differences between direct and alternating current	Www.educake.co.uk)
			alternating currentDraw and label the connections in a UK	Medium demand knowledge and application questions from, eg, revision work books
			mains plug	High demand knowledge, application and analysis
			 Describe the operation of a fuse and a 	questions from, eg, revision workbooks; exam questions
			singuit brooker	1 22 2 2 7 257 2 2 2 2 2 2 2 2 2 2 2 2 2

circuit breaker

			Identify safety measures in UK electricity	from www.physicsandmathstutor.com and
			supplies	www.aga.org.uk
			Define electric power	
			Recall and use the equation that links	
			power, current and potential difference	BBC Bitesize links for Electricity I & II:
			Recall and use the equation that links	https://www.bbc.co.uk/bitesize/quides/zgvq4qt/revision/1
			power, current and resistance	https://www.bbc.co.uk/bitesize/guides/zgvq-qq/revision/1
			Describe the heating effect of current	https://www.bbc.co.uk/bitesize/guides/zqf6msq/revision/1
			Describe the main features of the	nttps://www.bbc.co.uk/bitcsize/guides/zqfoffisg/revision/1
			National Grid	
			Explain the function of step-up and step-	
			down transformers within the National Grid	
		Student-led approach:		'Green' topics – review tasks:
	Monday	Your next two weakest topics /	Recall of core knowledge in topic	Blank page retrieval, followed by supplementary notes
	22 April	sub-topics on Paper 2	Use and application of core knowledge	and links (see <u>www.hayestl.com</u> for blank page retrieval
		(identified by you as 'green' on	Application of knowledge to novel	tips)
		your Paper 2 learning checklist)	contexts	Elaboration and extension of notes, using other sources,
			Analysis of novel contexts	eg, revision guides, textbooks, BBC Bitesize
			Linking and synthesis of knowledge	Cornell notes successive summarisation of topics, including Machinery (consumption of topics).
			between topics	including 'flash card' summary (see www.hayestl.com for
				Cornell notes tips)
		Core coverage:		 Dual coding of key ideas or diagrams (see www.hayestl.com for dual coding tips)
		Magnetism &	Magnetism & electromagnetism:	www.nayesti.com for dual coding tips)
		electromagnetism (6.7.1,	 Understand permanent and induced 	'Green' topics – practice tasks:
10		6.7.2, 6.7.3) – magnetic fields	magnetism	 High demand knowledge, application and analysis
ι 15		and forces, electromagnetism	Draw, describe and interpret magnetic	questions from, eg, revision workbooks; exam questions
Week		and refees, electromagnetism	field diagrams	from www.physicsandmathstutor.com and
×			Describe magnetic forces, repulsion and	www.aqa.org.uk Exam questions completed to time
			attraction	Exam paper and test paper question analysis (TEEPEE
			Describe how an electromagnet can be	model)
			built and controlled	,
			Know some uses for electromagnets	'Core coverage' – review tasks:
				Cornell notes successive summarisation of topics (see
				www.hayestl.com for Cornell notes tips)
				Mind maps linking concepts and knowledge within the
				topic and with other topics (see www.hayestl.com for
				mind mapping tips)
				Elaboration and extension of notes, using other sources,
				eg, revision guides, textbooks, BBC Bitesize
				'Core coverage' – practice tasks:
<u> </u>				Cure cuverage - practice tasks:

				 Low demand knowledge checking questions (eg, from revision guide or textbooks or the relevant topics from Www.educake.co.uk) Medium demand knowledge and application questions from, eg, revision work books High demand knowledge, application and analysis questions from, eg, revision workbooks; exam questions from www.physicsandmathstutor.com and www.aqa.org.uk BBC Bitesize links for Magnetism & electromagnetism: https://www.bbc.co.uk/bitesize/guides/zpt9v9q/revision/1 https://www.bbc.co.uk/bitesize/guides/zg43y4j/revision/1 https://www.bbc.co.uk/bitesize/guides/zw7897h/revision/1
Week 16	Monday 29 April	Student-led approach: Revisit all topics / sub-topics on Paper 1, focusing on accuracy and consistency of recall, and improving technique	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Linking and synthesis of knowledge between topics Exam technique 	 2 x whole Paper 1 exam paper practice (in conditions similar to exam room), exam papers from https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Question+papers Mark papers and analyse (use TEEPEE model) Diagnose further improvement tasks Complete improvement tasks Q&A flash cards on Paper 1 topics (to promote accurate and consistent recall)
Week 17	Monday 6 May	Student-led approach: Revisit all topics / sub-topics on Paper 1, focusing on accuracy and consistency of recall, and improving technique	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Linking and synthesis of knowledge between topics Exam technique 	 2 x whole Paper 1 exam paper practice (in conditions similar to exam room), exam papers from https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Question+papers Mark papers and analyse (use TEEPEE model) Diagnose further improvement tasks Complete improvement tasks Q&A flash cards on Paper 1 topics (to promote accurate and consistent recall)
Week 18	Monday 13 May	Student-led approach: Revisit all topics / sub-topics on Paper 2, focusing on accuracy and consistency of recall, and improving technique	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts 	 2 x whole Paper 2 exam paper practice (in conditions similar to exam room), exam papers from https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Question+papers Mark papers and analyse (use TEEPEE model)

Week 19	Monday 20 May	Wednesday 22 nd May, am - Paper 1 exam	 Linking and synthesis of knowledge between topics Exam technique 	Diagnose further improvement tasks Complete improvement tasks Q&A flash cards on Paper 2 topics (to promote accurate and consistent recall) Q&A flash cards on Paper 1 topics (to promote accurate and consistent recall)
Week 20	Half-term Monday 27 May	Student-led approach: Revisit all topics / sub-topics on Paper 2, focusing on accuracy and consistency of recall, and improving technique	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Linking and synthesis of knowledge between topics Exam technique 	 2 x whole Paper 2 exam paper practice (in conditions similar to exam room), exam papers from https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Question+papers Mark papers and analyse (use TEEPEE model) Diagnose further improvement tasks Complete improvement tasks Q&A flash cards on Paper 2 topics (to promote accurate and consistent recall)
Week 21	Monday 3 June	Student-led approach: Revisit all topics / sub-topics on Paper 2, focusing on accuracy and consistency of recall, and improving technique	 Recall of core knowledge in topic Use and application of core knowledge Application of knowledge to novel contexts Analysis of novel contexts Linking and synthesis of knowledge between topics Exam technique 	 2 x whole Paper 2 exam paper practice (in conditions similar to exam room), exam papers from https://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources?f.Resource+type%7C6=Question+papers Mark papers and analyse (use TEEPEE model) Diagnose further improvement tasks Complete improvement tasks Q&A flash cards on Paper 2 topics (to promote accurate and consistent recall)
Week 22	Monday 10 June	Thursday 14 th June, pm - Paper 2 exam		Q&A flash cards on Paper 2 topics (to promote accurate and consistent recall) Go on holiday after the last exam