Supporting your child through their Physics GCSE

Supporting with Science revision

The AQA Physics Examination entails 2 exams on 2 different days. Each paper makes up 50% of the final mark.

There is specific content for each paper (see the box below). Students are either completing the foundation (grade 1-5) or higher paper (grade 4-9). All papers consist of a range of multiple choice questions, short answers and extended writing questions. There is a higher percentage of multiple choice questions on the foundation paper.

The most prepared students are those who are answering lots of questions as part of their revision and who are focusing on their areas of weakness as identified in the past practise exam papers. Students should also use the revision resources that their class teacher has shared with them, in particular the materials on BBC bitesize: GCSE Physics (Single Science) - BBC Bitesize.

Students should be allocating a daily revision slot for completing the science revision described above. Any problems they identify should be discussed with their teachers to help them develop their understanding and confidence. Parents can support by encouraging their child to revise and by monitoring that this is taking place. For example, ask them to show you their Seneca account so you can see the percentage of the revision packs that your child has completed.

The exams

We have been doing practise questions all year and the next mock exams start after half term
w/c 31st October 2022.

Final examination dates are TBC with the stated content for each examination listed:

Physics Paper 1 1h 45m May/June 2023
Energy, Electricity, Particle model of matter, Atomic Structure
Physics Paper 2 1h 45m May/June 2023
Forces, Waves, Magnetism and Electromagnetism, Space physics

Course details:
GCSE Chemistry
Exam board: AQA
Specification: 8464
Website: AQA | Science | GCSE | Physics

What do I need to focus on to improve?
The topics to work on are highlighted on the assessment analysis sheets that are completed after each exam
paper in lesson…this is why the internal mock examinations are so important and require thorough preparation!

Useful revision websites

BBC Bitesize

CENTURY INTELLIGENT LEARNING

Primrose Kitten
YouTube tutorials for GCSE and A-Level

Revision sessions
These usually take place after school on Monday 2:45-3:45

Equations I need to know for Physics

1	**pressure due to a column of liquid = height of column × density of liquid × gravitational field strength (g)**	$\boldsymbol{p = h \rho g}$
2	(final velocity)^2 – (initial velocity)^2 = 2 × acceleration × distance	$v^2 - u^2 = 2\,a\,s$
3	**force = change in momentum / time taken**	$\boldsymbol{F = \frac{m\,\Delta v}{\Delta t}}$
4	elastic potential energy = 0.5 × spring constant × (extension)^2	$E_e = \frac{1}{2} k\,e^2$
5	change in thermal energy = mass × specific heat capacity × temperature change	$\Delta E = m\,c\,\Delta\theta$
6	period = 1 / frequency	$T = \frac{1}{f}$
7	magnification = image height / object height	
8	**force on a conductor (at right angles to a magnetic field) carrying a current = magnetic flux density × current × length**	$\boldsymbol{F = B\,I\,l}$
9	thermal energy for a change of state = mass × specific latent heat	$E = m\,L$
10	**potential difference across primary coil / potential difference across secondary coil = number of turns in primary coil / number of turns in secondary coil**	$\boldsymbol{\frac{V_p}{V_s} = \frac{n_p}{n_s}}$
11	**potential difference across primary coil × current in primary coil = potential difference across secondary coil × current in secondary coil**	$\boldsymbol{V_p\,I_p = V_s\,I_s}$
12	For gases: pressure × volume = constant	$p\,V = \text{constant}$

Higher Tier only equations are in **bold**.

8 Top Tips for Revising Science

1. Start revising early

— i.e. **months**, not days before the exam.

2. Plan your revision using a timetable

Planning out your revision means you can spend more time revising and less time worrying you've forgotten something.

3. Set up a nice, tidy study space

You'll need somewhere with good lighting, your pens close by, your phone out of sight and your TV unplugged. Try not to revise on your bed, or you'll be dreaming of pink igloos and elephants before you know it.

4. Vary your revision with different activities

Try a variety of different revision techniques — answering practice questions, writing down notes from memory, and using revision guides, flash cards, mind maps, exam questions and online resources.

5. Do lots of practice papers and questions

You'll find it far easier to answer questions in the exam if you've tried similar ones at home beforehand. Your teacher will be giving you some in science lessons, but you can find more online.

6. Keep your phone and other distractions away.

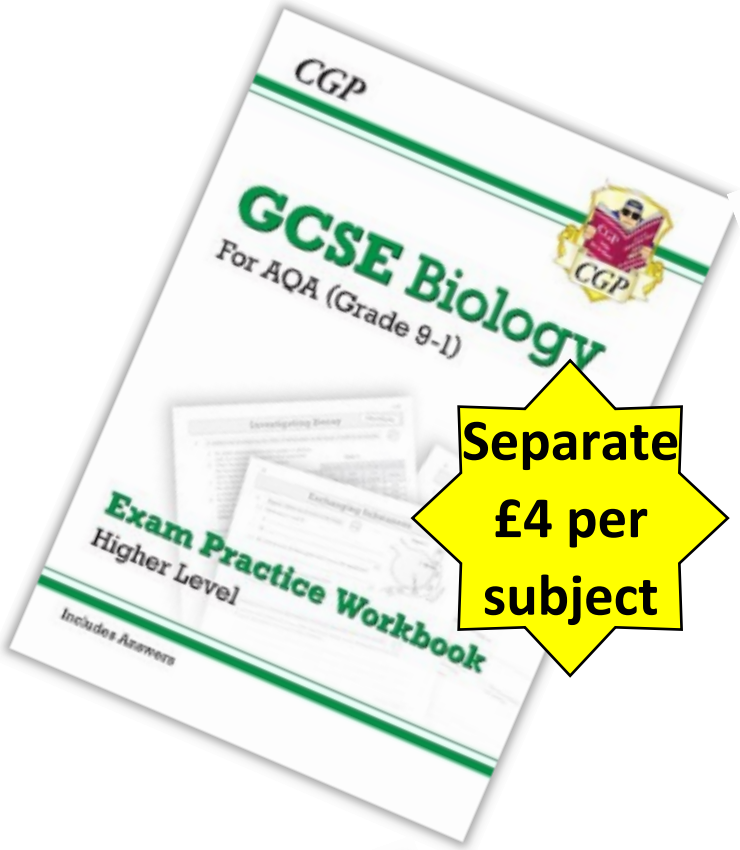
Phones are great, but they're a one-stop shop for procrastination. Heed our warnings and stick it in a drawer while you're revising.

7. Sleep and eat properly.

Sleep is more important than you'd imagine — it helps your brain store all the juicy information you've learned throughout the day. Drinking plenty of water and eating healthy foods will also boost your concentration throughout the day.

8. Don't just read your notes

You have to WRITE STUFF DOWN. This is really basic "how to revise" stuff.



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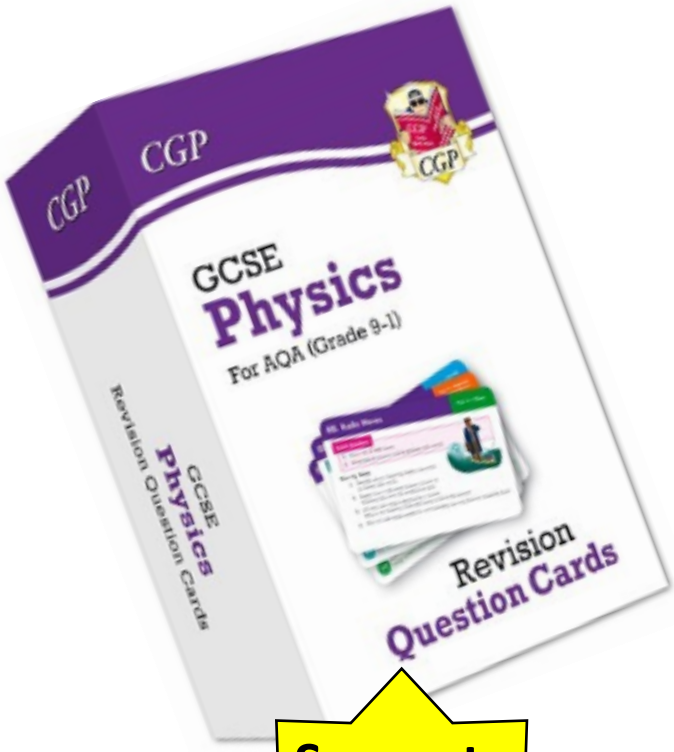

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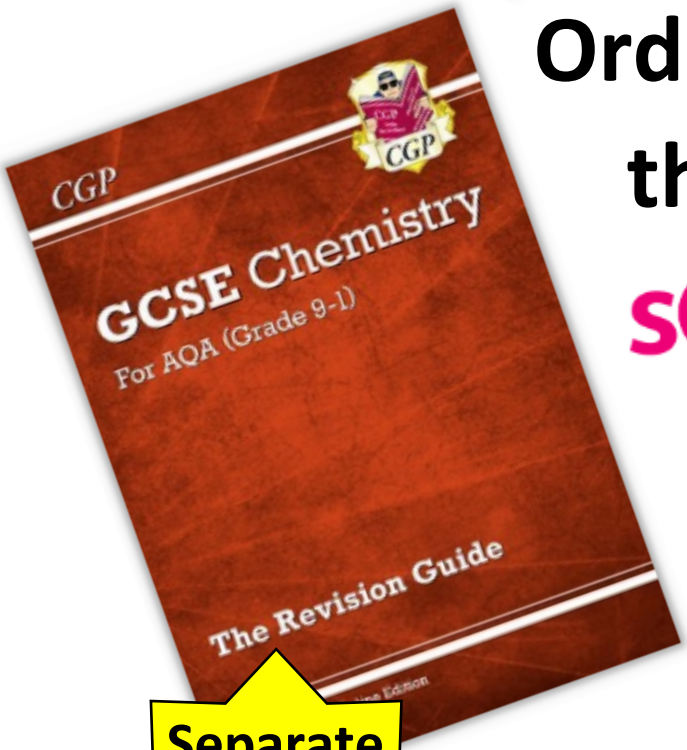

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Pictures for illustration, separate course products can be ordered in all available subjects-

Biology, Chemistry and Physics