

Noadswood School Science Department

Parental Information to support the Year 11 Parents evening

Key course information:

- Exam Board: AQA
- Course name: GCSE Combined Science

Or

- GCSE Separate Chemistry
- GCSE Separate Physics
- GCSE Separate Biology

Important recent assessments:

 Pupils have just completed their November Mock exams covering Paper 1 content.

Next important assessment:

Pupils will sit Mock exams on 26th January, 1st February, and 3rd February, covering Paper 2 content.

• To find the content that applies to each paper, look inside the front cover of your CGP revision guide, or look on the 'science revision' page on frog.

Tips for success:

• Success in science comes from:

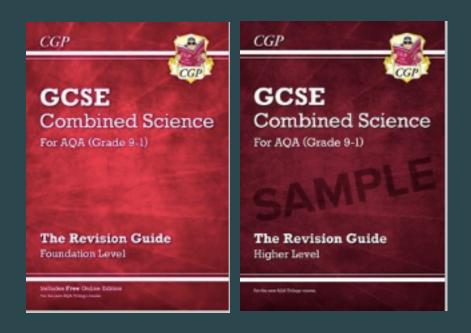
- Revising content until it is memorized.
- Practicing applying the content in exam questions until you are getting the correct answers.

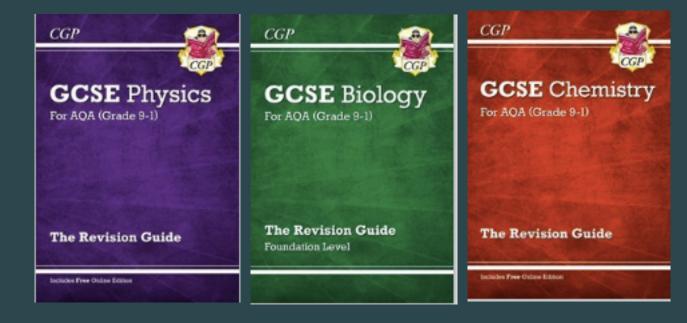
Tips for success:

- 1. Revision timetable. (careful planning, little and often)
- 2. Organisation of resources (quiz cards, revision guides and practice questions, quick links to websites etc)
- 3. Producing key notes, summary sheets, imaginative mindmaps, using quiz cards, practicing exam questions.

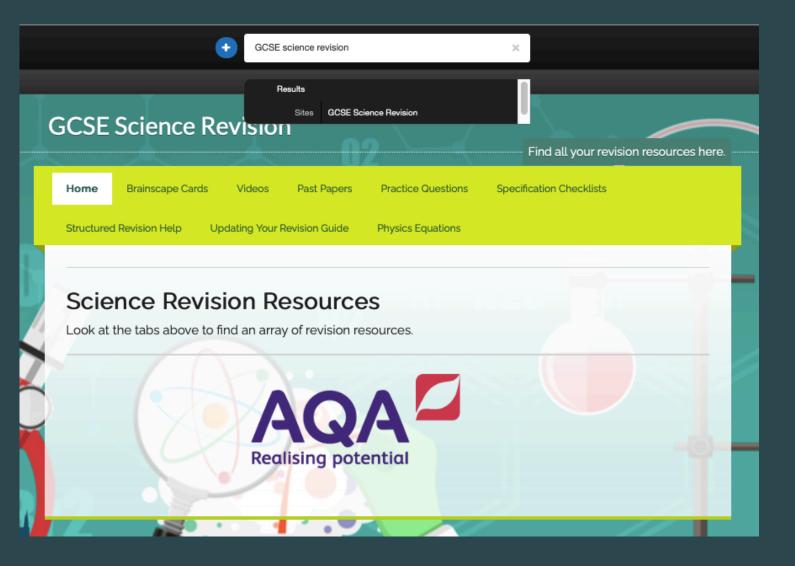
Resources:

• CGP revision guide for AQA GCSE grades 1-9.





Resources:



Search for 'GCSE science revision' on frog

Paper Revision Cards



© www.gcserevisionmonkey.co.uk More revision resources available online!



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Paper 1

What equation links gravitational potential energy, mass, gravitational field strength and height?

Answer

gravitational potential energy = mass x gravitational field strength x height

$$E_p = m g h$$

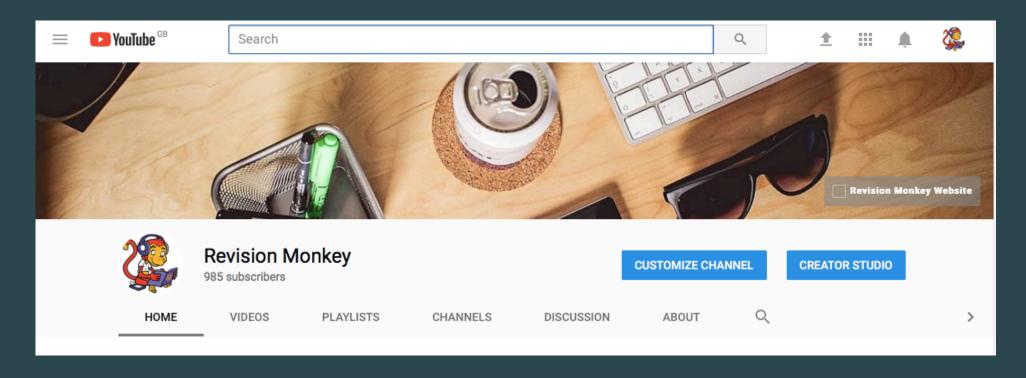
AQA Combined Science - Physics Equations

Brainscape links





Revision Videos / Hangouts



Revision Videos and Hangouts

Miss/Sir, what do I need to revise?

Paper 1		
Biology (1hr 15 mins)	Chemistry (1hr 15 mins)	Physics (1hr 15 mins)
Revision Guide Topics: Topic B1 – Cell Biology Topic B2 – Organisation Topic B3 – Infection and Response Topic B4 - Bioenergetics	Topic C1 – Atomic Structure and the Periodic Table Topic C2 - Bonding, Structure and Properties of Matter Topic C3 – Quantitative Chemistry Topic C4 – Chemical Changes Topic C5 – Energy Changes	Topic P1 – Energy Topic P2 – Electricity Topic P3 – Particle Model of Matter Topic P4 – Atomic Structure
Paper 2		
Biology (1hr 15 mins)	Chemistry (1hr 15 mins)	Physics (1hr 15 mins)
You will not take Biology Paper 2 in your December mocks	You will not take Chemistry Paper 2 in your December mocks	Topic P5 – Forces Topic P6 – Waves Topic P7 – Magnetism and Electromagnetism

Summary

- Regular revision is vital to success in Science.
- Weekly homework issued to help with recall
- GCSE science revision FROG Page (accessible to pupils) giving detail on what topics to revise for each exam.

Combined Science: - All Content Covered already:

- B1 Cell Biology
- B2 Organisation
- B3 Infection and Response
- B4 Bioenergetics
- B5 Homeostasis
- B6 Inheritance, variation and evolution
- B7 Ecology

- C1 Atomic Structure
- C2 Bonding, and properties of matter
- C3 Quantitative chemistry
- C4 Chemical Changes
- C5 Energy Changes
- C6 The rate of chemical change
- C7 Organic chemistry
- C8 Chemical analysis

- P1 Energy
- P2 Electricity
- P3 Particle Model
- P4 AtomicStructure
- P5 Forces
- P6 Waves
- P7 magnetism and electromagnetism

Separate Science: - Content Covered already:

- B1 Cell Biology
- B2 -Organisation
- B3 Infection and Response
- B4 Bioenergetics
- B6 Inheritance, variation and evolution
- B7 Ecology

- C1 Atomic Structure
- C2 Bonding, and properties of matter
- C3 Quantitative chemistry
- C4 Chemical Changes
- C5 Energy Changes
- C6 The rate of chemical change

- P1 Energy
- P2 Electricity
- P3 Particle Model
- P4 Atomic Structure
- P5 Forces
- P6 Waves
- P7 magnetism and electromagnetism
- P8 Space

Separate Science: - Content remaining to be covered:

• B5 -Homeostasis

- C7 OrganicChemistry
- C8 Chemical analysis

Combined Science vs. Separate Science

 Combined science is worth 2 GCSEs while the 3 separate sciences are worth 3 GCSE's

 Go from grades 1-9 and come in either Foundation Tier or Higher Tier

 Both provide a solid route into further education in science e.g. Physics, Biology or Chemistry A-level

Combined Science vs. Separate Science

 Separate science has always been offered to our top 2 sets, with the expectation that up to 15 or 20 pupils will move onto combined science.

 We recommend that only those pupils attaining the highest grades continue with separate science. Those pupils who are not quite reaching the very highest, we recommend that they do Combined science, as they will almost certainly perform better in those exams.

Further reading / sites:

- Books
- Stephen Hawking A Brief History of Time (0857501003)
- Richard Dawkins The Selfish Gene (0199291152)
- Cosmos Carl Sagan (0349107033)
- Einstein's Riddle Jeremy Stangroom (1408801493)
- Bad Science Ben Goldacre (000728487X)
- Six Easy Pieces Richard P Feynman (0140276661)
- Why Big Animals are Rare Paul Colinvaux (0140135650)

Podcasts

- The Infinite Monkey Cage > https://itunes.apple.com/gb/podcast/the-infinite-monkey-cage/id343580439?mt=2
- Natural Histories > histories/id1001143063?mt=2
- A History of the World in 100 Objects
 https://itunes.apple.com/gb/podcast/history-world-in-100
 - objects/id351096296?mt=2
- TED talks > https://itunes.apple.com/gb/podcast/tedtalks-audio/id160904630?mt=2

Apps

- Human Body > https://itunes.apple.com/gb/app/the-human-body-by-tinybop/id682046579?mt=8
- NASA Visualization > https://itunes.apple.com/gb/app/nasa-visualization-explorer/id448700202?mt=8
- Wonders of the Universe > https://itunes.apple.com/gb/app/brian-coxs-wonders-universe/id508465867?mt=8
- Wonders of Life > https://itunes.apple.com/gb/app/brian-coxs-wonders-of-life/id773114288?mt=8
- Elements > https://itunes.apple.com/gb/app/the-elements-by-theodore-gray/id364147847?mt=8
- Elements in Action > https://itunes.apple.com/gb/app/elements-in-action-by-theodore/id739281034?mt=8