



# HOMework

SCIENCE KS4

BRAMHALL HIGH SCHOOL

**Aim:**

Students will be set either a biology, a chemistry or a physics homework as part of a timetabled rotation. These will be designed to promote a passion for science, to encourage pupils to research and find answers for themselves and to consolidate, extend and apply what has been learnt in class.

**Types of regular homework at KS3:**

- Consolidation worksheets and activities
- Exam Questions
- Research tasks
- Creating displays and models
- Revision
- Online learning (Seneca and Active learn tasks)
- Consolidation of notes

**Marking and feedback:**

- Some longer pieces and exam questions will be teacher marked and assessed to a grade with targets for improvement as appropriate
- Others will be teacher assessed out of a maximum number.
- Activities which lend itself to it may be Peer or self-assessed – with the teacher providing modelled answer in class
- Seneca and activelearn tasks will be auto marked
- Research, consolidation and revision homework will be checked for completion but
- won't be graded, targets for improvement will be included where this is appropriate.

**Recommended wider reading:****KS4**

- BBC Bitesize – KS4 EDEXCEL Combined Science - GCSE Combined Science - Edexcel - BBC Bitesize
- BBC Bitesize – KS4 EDEXCEL Separate biology - GCSE Biology (Single Science) - Edexcel - BBC Bitesize
- BBC Bitesize - KS4 EDEXCEL Separate chemistry - GCSE Chemistry (Single Science) - Edexcel - BBC Bitesize
- BBC Bitesize – KS4 EDEXCEL Separate physics - GCSE Physics (Single Science) - Edexcel - BBC Bitesize
- Seneca Learning - [www.Senecalearning.com](http://www.Senecalearning.com)
- Pearson Activelearn software – [www.pearsonactivelearn.com](http://www.pearsonactivelearn.com)
- Focus science software (practical activities, animations and video links - Focus eLearning by Focus Educational Software Ltd.
- TED ED - <https://www.youtube.com/teded/featured>
- In a nutshell - <https://www.youtube.com/user/Kurzgesagt>
- Freescience lessons - [https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3\\_bw](https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw)

- Primrose Kitten - <https://primrosekitten.org/gcse-science/> or on youtube - <https://www.youtube.com/channel/UCBgvmal8AR4QIK2e0EfJwaA> BMJ News - [www.bmj.com/news](http://www.bmj.com/news)
- Nature - [www.nature.com/](http://www.nature.com/)
- New Scientist - [www.newscientist.com/](http://www.newscientist.com/)
- RSB Letters & Opinions - [royalsocietypublishing.org/journal/rsbl](http://royalsocietypublishing.org/journal/rsbl)

**Books (some push KS4+);**

- Adam Kay – This is going to hurt
- Matthew Walker – Why we sleep
- Dean Burnett – The idiot brain
- Adam Nicolson – The sea is not made of water
- Emma Young – Super senses
- Bill Bryson – The body
- Randall Munroe – What if?: Serious scientific questions to absurd hypothetical questions
- Bill Bryson – A short history of nearly everything
- Ben Goldacre – Bad science
- Charles Darwin – Origin of the Species
- Matt Ridley – Genome
- James Watson: DNA
- Daniel Chamovitz – What a plant knows
- Steven Pinker – The language instinct
- Steven Pinker – How the mind works
- Richard Dawkins – The selfish gene
- Jonny Keeling – Seven World One Planet
- Professor Brian Cox – Forces of Nature
- Professor Brian Cox – Wonders of Life
- Sir David Attenborough – Amazing Rare things