

KS4 Science Examination Information

Core and Additional Science

*How to prepare for your science GCSEs*

Gosford Hill School



## Introduction

We hope you find this booklet helpful as we come to the final preparation for the summer GCSE examinations. We want all of our students to leave their compulsory period of schooling with the best possible results. Results will not only enable them to take the next step in their chosen career pathway, but that they will also be proud to write whenever and wherever required for the rest of their lives.

If at any point in the revision or GCSE examination period you are concerned or worried then please contact us – we will help whenever possible.

## Exam information

These students will achieve 2 GCSEs (Core and Additional).

### **Core Science GCSE:**

Biology Unit 1 (B1)	1hr Paper (60marks)	25%	<b>Tuesday 16<sup>th</sup> May (pm)</b>
Chemistry Unit 1 (C1)	1hr Paper (60marks)	25%	<b>Thursday 18<sup>th</sup> May (am)</b>
Physics Unit 1 (P1)	1hr Paper (60marks)	25%	<b>Wednesday 24<sup>th</sup> May (pm)</b>
Controlled Assessment (ISA)	2 written papers which assess practical work and data processing (50marks)	25%	This was completed in school

NB: in all written papers (including the ISA examination) there is 1 question, which assesses the quality of written communication (spelling, punctuation and grammar).

### **Additional Science GCSE**

Biology Unit 2 (B2)	1hr Paper (60marks)	25%	<b>Friday 9<sup>th</sup> June (am)</b>
Chemistry Unit 2 (C2)	1hr Paper (60marks)	25%	<b>Wednesday 14<sup>th</sup> June (am)</b>
Physics Unit 2 (P2)	1hr Paper (60marks)	25%	<b>Friday 16<sup>th</sup> June (am)</b>
Controlled Assessment (ISA)	2 written papers which assess practical work and data processing (50marks)	25%	This was completed in school

NB: in all written papers (including the ISA examination) there is 1 question, which assesses the quality of written communication (spelling, punctuation and grammar).

## Learning at Home

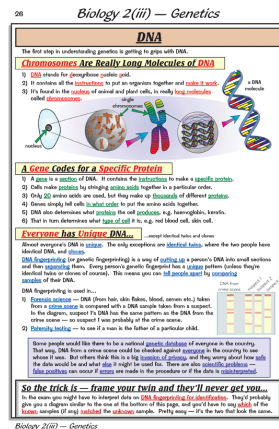
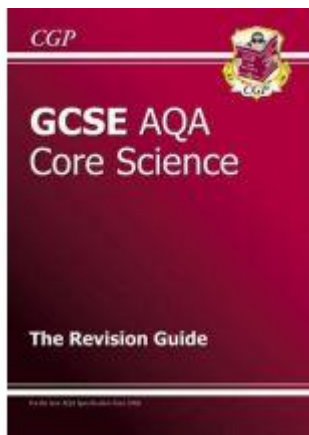
### Past exam questions:

Your teacher has access to a large quantity of past paper questions. These can be collected during lesson time and after school 3:20-4:20 on Tuesdays from S4. These have been designed to complement the checklist that your teachers have provided you with so that you can concentrate on the areas of Science which are 'red' and 'amber'.

### Learning resources:

### Revision guides:

These cost £3 and can be bought from the science technicians. These have summarised notes in and questions to help you test your knowledge.



## BBC Bitesize Science

<http://www.bbc.co.uk/schools/gcsebitesize/science/>

This website summarises key pieces of information and then has activities and tests to help you improve on and test your knowledge of the topic.

The screenshot shows the BBC Bitesize website. At the top, there's a navigation bar with 'News', 'Sport', 'Weather', 'iPlayer', 'TV', 'Radio', and 'More...'. Below that is the 'GCSE Bitesize' logo. The main content area is titled 'Science' and 'Keeping healthy'. It lists two topics: 'Diet and exercise' and 'Defending against infection', each with 'Revise' and 'Activity Test' links. There's also a 'Chat' section with a 'Science Message Board' and a 'Listen' section.

The screenshot shows the BBC Bitesize website interface. At the top, there's a navigation bar with 'BBC' logo and links for News, Sport, Weather, iPlayer, TV, Radio, and More... A search bar is on the right. Below this is a blue banner with 'GCSE Bitesize' and logos for BBC Radio 1 and BBC 1Xtra. A breadcrumb trail reads: Home > Science > AQA > Keeping healthy > Diet and exercise. On the left, a sidebar lists subjects like Art & Design, Business Studies, Design & Technology, DIDA, Drama, English, English Literature, French, Geography, German, History, ICT, Irish, Maths, Music, Physical Education, Religious Studies, Science (highlighted), Spanish, Welsh 2nd Language, Audio, Games, and Message Boards. The main content area is titled 'Science' and 'Diet and exercise'. It features a 'Test Bite' section with four questions and multiple-choice options. The first question is '1. What is 'the metabolic rate'?' with options: 'The speed at which our food is digested', 'The speed at which chemical reactions take place in our bodies', and 'The speed at which we eat'. The second question is '2. After exercise:' with options: 'the metabolic rate stays permanently high', 'the metabolic rate stays permanently low', and 'the metabolic rate stays high for a while'. The third question is '3. What is a feature of low-density lipoproteins (LDLs)?' with options: 'LDLs are 'good' cholesterol', 'LDLs carry excess cholesterol back to the liver', and 'LDLs carry cholesterol from the liver to the cells of the body'. The fourth question is '4. What is it best to have for a healthy heart?' with options: 'A high proportion of HDL compared to LDL', 'A low proportion of HDL compared to LDL', and 'A lot of cholesterol in the diet'. On the right side, there are three interactive sections: 'Chat' with a 'Science Message Board' and a 'More Message' link; 'Listen' with 'Core Science' and 'Additional Science' audio options; and 'Play' with 'R U Revising Science?' video content.

## Revision strategies

### Setting the scene:

- A time and place to revise without distraction
- Access to the internet or revision guides
- Sleep
- Food
- Work/Life balance

### Preparing for revision:

- Make sure you have a complete set of notes for the topic.
- Make sure you have worked out which topics you know well and which topics you need to focus revision on. Your teachers will provide you with a personalised checklist for each topic to guide you.
- Work out which revision strategy works best for you.
- Create a revision timetable so that you know what you are revising and when.

### Revision timetable:

- This is to help you plan what you need to revise and when.
- Ensure that you focus on the topics that you know least.
- The most effective revision is in 30 minute chunks with a 10 minute break in between.
- Be as active as possible during your revision (see the strategies later in the booklet).
- Ensure that you test your knowledge by practicing exam questions as you need to know how the examiners will test you and what answers they like to see.
- REMEMBER: This is flexible and acts as guidance. You must also have breaks and do things that you enjoy around revision.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
3:30-4:00		Science Revision Session			
4:00-4:30					
4:30-5:00	Watch TV	Watch TV	See friends	Watch TV	See family
5:30-6:00	Dinner	Dinner	Dinner	Dinner	Dinner
6:00-6:30	Revision Science B1	Revision Maths	Revision English	Revision Science B2	Revision French
6:30-7:00	Break  Revision Science C1	Break  Revision Maths	Break  Revision English	Break  Revision Science C2	Break  Revision French
7:00-7:30	Watch TV	Watch TV	Watch TV	Watch TV	Watch TV
7:30-8:00	Revision Science P1	Revision Maths	Revision Geography	Revision Science P2	Revision Drama
8:00-8:30	Break  Revision Science exam questions	Break  Revision Maths	Revision Geography	Break  Revision science exam questions	Break  Revision Drama
8:30-9:00	Begin to relax for bed	Begin to relax for bed	Begin to relax for bed	Begin to relax for bed	Begin to relax for bed

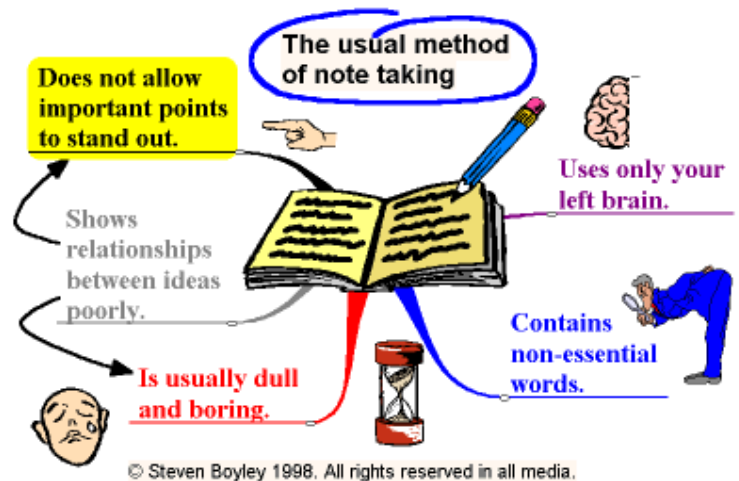
## Revision strategies:

### Mind Maps:

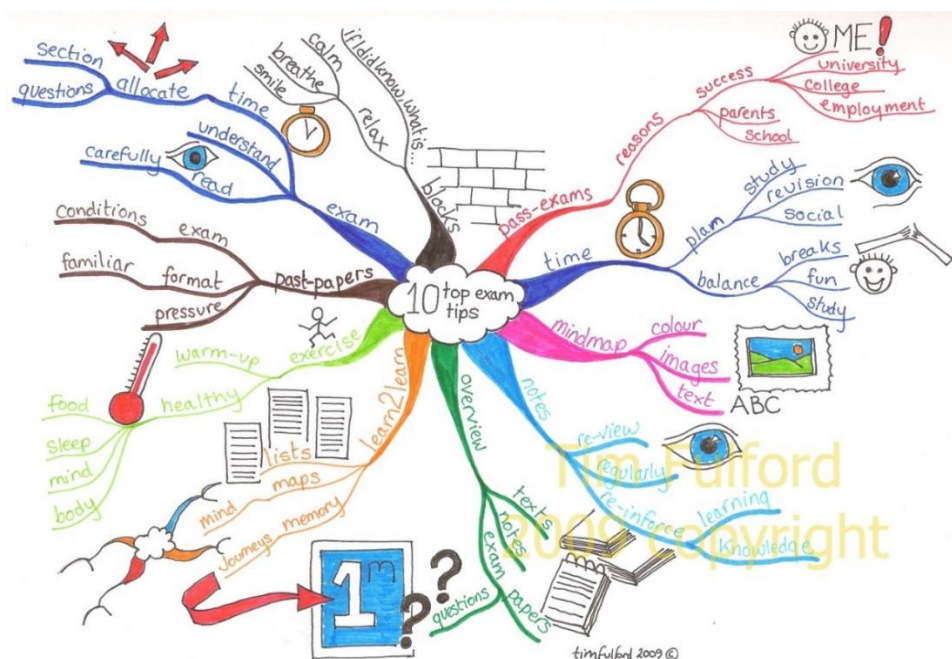
Linking your notes together around a central point. Use colours and images. You could place these around the house so that you keep seeing them.

#### How to mind map:

1. Start with the theme in the middle of the page.
2. Each branch must relate to the branch before it.
3. Use only key words and images.
4. Write how the key words link along the linking lines.



5. Use highlighters and coloured markers to colour code branches.
6. Make things stand out on the page so they stand out in your mind.
7. Design images you can relate to which will help you remember key information.
8. Use this mind map to then practice exam questions related to this topic.

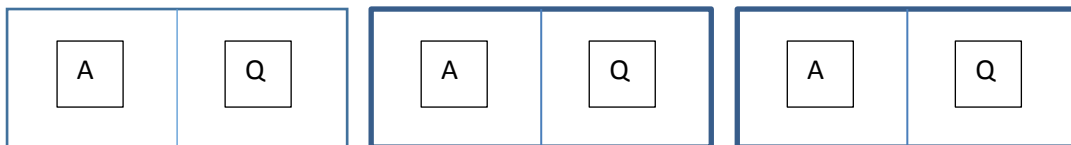


## Quiz Cards

- Look through your notes on a topic that you need to revise.
- Summarise each section into a question and write this onto one side of a card.
- Write the 'perfect' answer on the other side of the card (already you are revising when preparing these cards as you are thinking about the best way to condense the information that you have learnt).
- Now get someone to test you on these questions.
- You and your friends could make cards for different topics and test each other!
- Now practice a past exam question on this topic.

## Make games

- Look through your notes on a topic that you need to revise.
- Summarise each section into a question and write on one side of the domino.
- On a neighbouring domino write the 'perfect' answer.
- On the same domino write another question.
- On the neighbouring domino write the 'perfect' answer.
- Keep doing this until you have made a loop of questions and answers.
- You and your friends could make cards for different topics and test each other!
- Then practice answering past exam questions on this topic.



## Using your emotions and memories

This strategy works great for sequences of information that you have to remember in an order.

### *Using your everyday experiences*

- Think of a route that you walk daily.
- At certain memorable spots along the route think of part of the topic that you need to remember.
- When you re-walk the route in your mind you should be able to remember those parts of the topic.

### **Making the most of your notes**

**Condense.** Fitting notes onto one side of paper makes them easier to stomach, so rewrite and cut down as you go.

**Highlight.** Target key areas using colours and symbols. Visuals help you remember the facts.

Read, cover, write is a great technique.

### **Use technology**

- Use the revision websites that are listed previously in this booklet.
- Record yourself reading your notes and play this as you are falling asleep.

### **Past paper exam questions**

The best way to revise what the examiners want you to write is by practicing exam questions.

- Read the question.
- Highlight the key words in the question.
- Answer the question. There should be roughly the same number of points made as the number of marks that you can achieve. Start with the simplest point and then build on each point with more detail.
- Make sure your answer links back to what the question is asking.
- Use the mark scheme to check your answer. Highlight the parts of your answer that got the mark.
- Improve on your answer if you have missed any marks.
- Ask your teacher if you do not understand the question or the answer!

### **Command words for exam questions**

<b>Calculate</b> Find out using mathematics.	<b>Compare</b> Write the similarities and differences.
<b>State</b> Write briefly the main points.	<b>Explain</b> Describe, giving reasons and causes.
<b>Conclude</b> Decide after reasoning something out.	<b>Evaluate</b> Say the good points and the bad points.
<b>Define</b> Give the meaning. This should be short.	<b>Describe</b> Give a detailed account/description.

### **Contact information**

If you have any queries please contact Clair Edwards (Acting Science Faculty Leader)

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