



# The Cornerstone Academy

The best in everyone™

Part of United Learning

You are studying:

AQA GCSE science trilogy: (9-1)

## Key exam dates:

Biology 1—Tuesday 13th May

Chemistry 1—Monday 19th May

Physics 1—Thursday 22nd May

Biology 2—Monday 9th June

Chemistry 2—Friday 13th June

Physics 2—Monday 16th June

## External support

1. [Seneca learning](#)
2. [BBC Bitesize](#)
3. [Save my exams](#)
4. [Cognito Science](#)
5. Sparx Science





Week starting	Physics Topic	Chem Topic	Bio Topic	Week starting	Physics Topic	Chem Topic	Bio Topic
Monday	Energy	Atomic structure	Cell biology	Monday	Energy	Atomic structure	Cell biology
January 13 <sup>th</sup>				March 17 <sup>th</sup>			
January 20 <sup>th</sup>	Electricity part 1	Bonding and structure	Organisation	March 24 <sup>th</sup>	Electricity part 1	Bonding and structure	Organisation
January 27 <sup>th</sup>	Electricity part 2	Quantitative chemistry	Infection & response	March 31 <sup>st</sup>	Electricity part 2	Quantitative chemistry	Infection & response
February 3 <sup>rd</sup>	Particle model	Chemical changes	Bioenergetics	April 7 <sup>th</sup>	Particle model	Chemical changes	Bioenergetics
February 10 <sup>th</sup>	Atomic structure	Energy changes	Homeostasis & response 1	April 14 <sup>th</sup>	Atomic structure	Energy changes	Homeostasis & response 1
February 17 <sup>th</sup>	Forces part 2	Rate of chemical change	Homeostasis & response 2	April 21 <sup>st</sup>	Forces part 2	Rate of chemical change	Homeostasis & response 2
February 24 <sup>th</sup>	Forces part 2	Organic chemistry	Inheritance & evolution 1	April 28 <sup>th</sup>	Forces part 2	Organic chemistry	Inheritance & evolution 1
March 3 <sup>rd</sup>	Waves	Chemical analysis	Inheritance & evolution 1	May 5 <sup>th</sup>	Waves	Chemical analysis	Inheritance & evolution 1
March 10 <sup>th</sup>	Electro-	Atmosphere & resources	Ecology	May 12 <sup>th</sup>	Electro-	Atmosphere & resources	Ecology

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<b>When should I revise?</b>		<b>2</b>
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During year 11, you have a lot to think about and a lot of different things which you have to juggle. You should revise independently so that you can close the specific gaps which you have in your knowledge.

However, because you have to plan your own independent revision, its easy to forget revision or to only do it in large bursts right before an assessment.

Planning when and what you are going to revise reduces the number of decisions you need to make every day and will reduce the risks of you not revising or your revision being ineffective because you have left it until the last minute.

## Prioritise your subjects

- List all your subjects
- Rank your subjects from number 1 -9 (1 being strongest)
- Then re-write your list in the order of the subjects you have numbered.

Biology  
Drama  
Physics  
English literature  
English Language  
PE  
Geography  
Chemistry  
Business

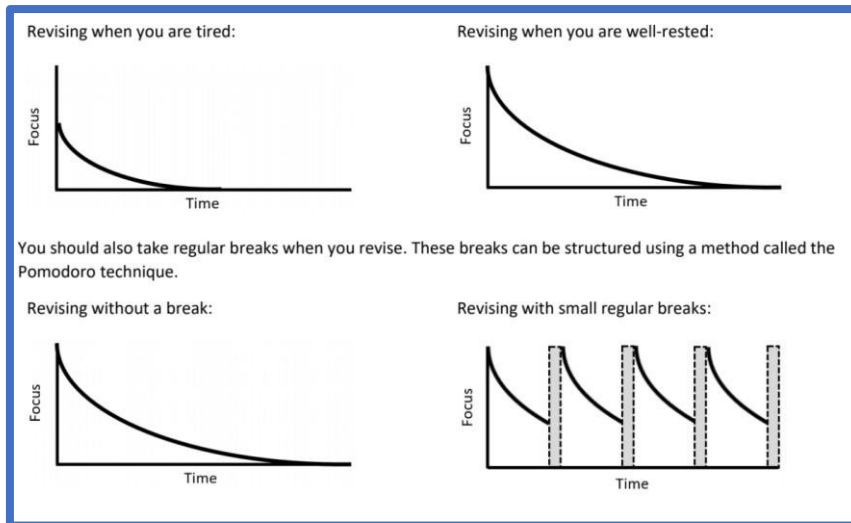
Your list:

## Writing your timetable

1. Write in everything you have planned prior to creating your revision timetable. (Going out for tea, going to the gym, playing sport etc)
2. Write in upcoming exams & deadlines
3. Not every space needs to be full – leave yourself time to relax too!
4. Focus on the subjects in RED first, these are the ones you are least likely going to choose – but they are the highest priority.
5. Write in the subjects you are going to cover and when. Be specific around what you will cover each time you sit down an revise.

## When should I revise?

In order to revise effectively, you have to think hard. Thinking hard is tiring. Therefore, when you revise, you should choose a time when find it easiest to focus. This should be a time when you are well-rested and when you are used to working.



### Managing your time when revising

Pomodoro technique is **highly effective** as it helps you effectively manage your time and work on a task without distractions. It is also beneficial as it helps you become more disciplined and think about your work. This technique is designed to combat multitasking and improve concentration.

#### STEP 1



Pick a task

#### STEP 2



Set a 25-minute timer

#### STEP 3



Work on your task until the time is up

#### STEP 4



Take a 5 minute break

#### STEP 5



Every 4 pomodoros, take a longer 15-30 minute break

### Do:

- Get into a routine of revising at a particular point every day.
- Revise when you are well-rested or at a time when you are used to working.
- Take regular small breaks.



### Don't:

- Depend on when you want to revise.
- Revise late at night or when you are tired.
- Try to force yourself to work for long periods of time without a break.



	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8:00-9:00							
9:00-10:00							
10:00-11:00							
11:00-12:00							
12:00-13:00							
13:00 - 14:00							
14:00-15:00							
15:00-16:00							
16:00-17:00							
17:00-18:00							
18:00-19:00							
19:00-20:00							



## Summary: How to use flash cards



1.

### Identify knowledge

What are you creating flash cards on?

Do you have your knowledge organizer?

Use your book to look at previous misconceptions from whole class feedback.



2.

### Colour coding

Use different coloured flash cards for different topics. This helps with organization NOT recall



3.

### Designing

1 Question per flashcard.

Making them concise and clear.

Use a one word prompt, so that you can recall as much as you can.

No extended answer questions.



4.

### Using

Write your answers down, then check. Or say your answers out loud. This really clearly shows the gaps in your knowledge.

Do not just copy & re-read.

Shuffle the cards each time you use them.

Use the Leitner system to use flash cards everyday.



5.

### Feedback

How have you performed when you look back at your answers?

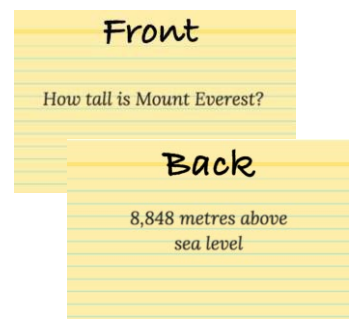
Is there anything you need to revisit in more detail?

Is your knowledge secure? If so, move onto applying knowledge in that area in specific extended exam questions.

Avoid answering the questions in your head: research shows that when you read a question and answer it in your head, you aren't actually testing your knowledge effectively. Say the answer out loud or write it down before checking it against the card, so you are truly testing if you can explain the answer properly

## Flash card top tips

- The most effective flashcards include one question followed by one answer (or one term followed by one definition).
- Don't force your brain to remember a complex and wordy answer. It's easier for your brain to process simpler information so split up your longer questions into smaller, simpler ones.
- You will end up with more flashcards this way but your learning will be a lot more effective.

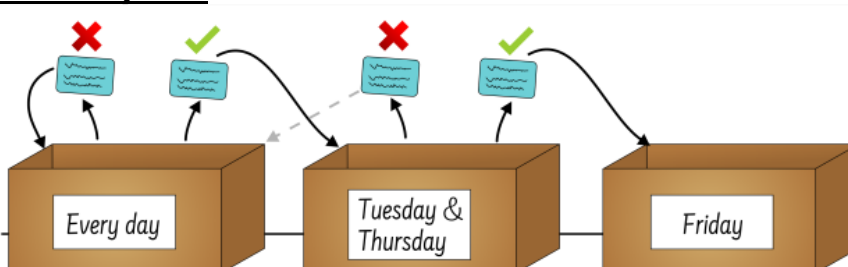


## Using flash cards

### Self Quizzing

- Read the question** on your flash card
- Write your answer** in your HL book
- Put your flash card **down to one side**
- Move onto the **next** card
- Repeat** steps 1-3
- Keep your flash cards **in the order** you have quizzed them in.
- Mark** your answers – **highlight** any answers you got incorrect.

### Leitner System



- Every card starts in Box 1.
- If you get a card right, move it to the next Box.
- If you get the card wrong, move it down a box — in the original version you move it all the way back to Box 1.

Quiz 1		Quiz 2	
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	
7.		7.	
8.		8.	
9.		9.	
10.		10.	

Quiz 3		Quiz 4	
1.		1.	
2.		2.	
3.		3.	
4.		4.	
5.		5.	
6.		6.	
7.		7.	
8.		8.	
9.		9.	
10.		10.	



# Summary: Self Quizzing



1.	2.	3.	4.	5.
Identify knowledge	Review and create	Cover and answer	Self mark & reflect	Next time
Identify knowledge/content you wish to cover.	Spend around 5-10 minutes reviewing content (knowledge organisers/class notes/text book)  Create x10 questions on the content (If your teacher has not provided you with questions)	Cover up your knowledge and answer the questions from memory.  Take your time and where possible answer in full sentences.	Go back to the content and self mark your answers in <b>green</b> pen.	Revisit the areas where there were gaps in knowledge, and include these same questions next time.

Ensure that you complete all subjects and all topics – not just the subjects you enjoy the most of find easiest.  
Practice makes perfect!

Follow the 5 step process to self quiz 3 topics of your choice.

Mark your answers in green pen and highlight specifically the questions you got wrong.

Quiz 1			
	Question	Answer	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Summary: How to create a mind map



1.	2.	3.	4.	5.
Identify knowledge	Identify sub topics	Branch off	Use images & colour	Put it somewhere visible
Select a topic you wish to revise. Have your class notes/knowledge organisers ready.	Place the main topic in the centre of your page and identify sub topics that will branch off.	Branch of your sub topics with further detail.  Try not to fill the page with too much writing.	Use images and colour to help topics stick into your memory.	Place completed mind maps in places where you can see them frequently.

Avoid using too much information: mind maps are designed to summarise key information and connect areas of a topic/subject. If you overcrowd the page, you lose the point of the mind map and will find it harder to visualise the information when trying to recall it

Follow the 5 step process to create a mind map for 3 different topics of your choice.  
You can also colour code the information you are confident with in one colour and information that you are unsure about in another colour.

Topic 1

## Summary: Brain dumps



1.

### Identify knowledge

Identify the knowledge/topic area you want to cover.



2.

### Write it down

Take a blank piece of paper/white board and write down everything you can remember about that topic. (with no prompts)

Give yourself a timed limit (e.g. 10 minutes)



3.

### Organise information

Once complete and you cannot remember any more use different colours to highlight/underline words in groups.

This categories/links information.



4.

### Check understanding

Compare your brain dump to your K/O or book and check understanding.

Add any key information you have missed (key words) in a different colour.



5.

### Store and compare

Keep your brain dump safe and revisit it.

Next time you attempt the same topic try and complete the same amount of information in a shorter period of time or add more information.

Brain dumps are a way of getting information out of your brain.

Follow the 5 step process to complete 3 brain dumps for different topics of your choice.

You can also complete this in two colours. One colour for content you know and another colour for content you need to revise / that you added.

### Topic 1

## Summary: Interleaving

*Interleaving is a theory that revising more than one topic in each session will help you make better links between them.*

A  $\Rightarrow$  B  $\Rightarrow$  C  $\Rightarrow$  D

B  $\Rightarrow$  D  $\Rightarrow$  A  $\Rightarrow$  C



1.

### Switch

Switch between topics during each session.

It allows you to think about what you are doing with your time when you are revising.

2.

### Review in different orders

When reviewing make sure you do it in a different order that you learnt them, or previously revised them.

By revisiting material from each topic several times, in short bursts, this **increases the amount of information you can recall in your exams.**

3.

### Make links to remember more.

Try to make links between ideas and review your revision notes.

This helps you make connections between topics and forces you to think harder about which strategies need to be applied to which problems.

## Applying interleaving to your revision

1. Break units down into small chunks and split these over a few days rather than revising one whole topic all at once.
2. Decide on the key topics you need to learn for each subject.
3. Create a revision timetable to organise your time and space your learning.

### Blocking



**Interleaving is for topics within one subject – not subjects themselves.**

### Interleaving



**You can apply this in your revision timetable.**

**When revising science, mix up the topics that you study in that session, don't just focus on one.**

## Dual Coding

## Summary: Dual Coding

Dual coding is the process of blending both **words** and **pictures** while learning. Viewing those two formats gives us **two different representations** of the **same** piece of information.



1.

### Drawings

These boost learning by getting you to think deeply about information.



2.

### Diagrams

These are helpful for breaking down complex concepts or processes to make them easier to understand.



3.

### Posters

These are great for combining writing, pictures and diagrams all within one page of information.



4.

### Timelines

These can be used of information that happens in a particular order or sequence.



5.

### Graphic organisers

These organise verbal and visual information by the relationships between different concepts. Examples include tree diagrams, mind maps and Venn diagrams.

## 4 Key Principles for using dual coding



**Cut** - Reduce the amount of content, be selective and only use the most important information.



**Chunk** - Divide the content into groups of related information;



**Align** - Make sure that words and pictures are neatly ordered, making them easier to read;



**Restrain** - Avoid "overdoing" it. In other words, don't go crazy with different colours and fonts.

Topic 1

Topic 2

Summary: Spacing

- Spacing is regularly revisiting material so that you are doing little and often instead of all at once.
  - Doing a little amount regularly is more effective than doing a lot all at once. We do this so that we don't get swamped and overwhelmed
- To commit something to memory, it takes time and repetition.**

WHY? This is because the time in between allows you to forget and re-learn the information, which cements it in your **long-term memory**

Optimum Spacing

- Research suggests there is an 'optimal gap' between revision sessions so you can retain the information.
- If the test is in a month, you should review the information around once a week.  
If the test is in a week, create time once a day.

Why use Spacing?

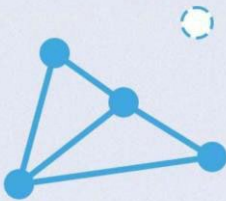
- Doing something little and often – spacing – beats doing it at once, or cramming
- The time in between revision allows you to forget and re-learn the information, which cements it in your long-term memory
- It cements information into your long-term memory
- We can learn more information over time than in one longer session
- It helps you revise more efficiently

Time to the test	Revision Gap
1 Week	1-2 days
1 Month	1 week
3 Months	2 weeks
6 Months	3 weeks
1 Year	1 month

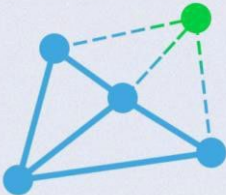
Retrieval

“ Retrieval practice is defined by **Mark Enser** as ‘retrieving something from our memories to make it easier to recall in future.’ If using it makes recall easier, surely this is a big win for learning and the progress of our students. ”

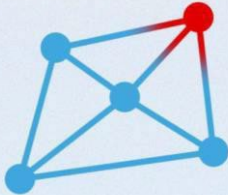
1. Identifies gaps in knowledge



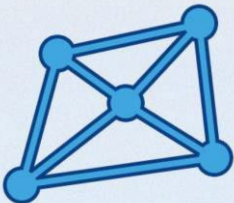
2. Makes connections



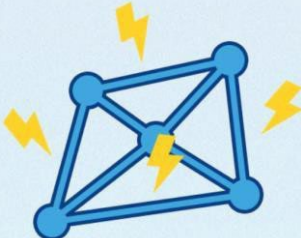
3. Checks for misunderstandings



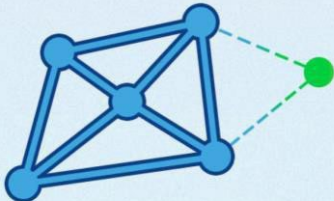
4. Strengthens connections

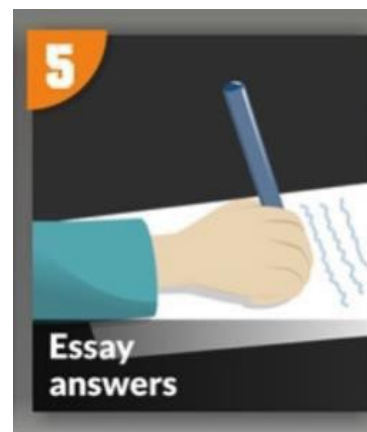


5. Makes connections robust under pressure and stress



6. Makes it easier to learn new things





Retrieval practice is one of the most effective ways to revise. By answering questions rather than merely reading or highlighting information, you're putting yourself in the best position possible to succeed and remember as much of your subjects as possible. Past papers, essays, multiple choice tests and flashcards are a great way of doing it.





## Brain Dump

Choose a topic and write down as much as you can remember, without referring to your notes. Check your notes and see what you missed then try fill the gaps without the notes. Check your notes a third time and add the missing information.



## Flash cards

Write flash cards for each topic, in all subjects, then mix them up for the most effective revision. Check out the Leitner System for effective spacing and interleaving. Keep your flash cards simple – one question, one answer per card.



## Map it out

Take an essay question or writing question and map out your answer, without writing a full response. Look at the mark scheme and decide if your plan meets the criteria. DO this for a number of questions, then choose one and write the full response.



## Past papers

Ask your teacher for practice questions or exam papers. Complete them without notes in the exam conditions, then check your answers and identify the gaps in your knowledge, so you can target your revision.



## Quizzes

Write a set of questions and answers and ask someone to test you. Its important to either write or say your answers loud. Reading through quizzes in your head can give you a false sense of security.



## Thinking hard: Reduce

Read a section of your notes then put them aside and reduce what you need into 3 bullet points, each one no more than 10 words. Look back at the notes and decide if you missed anything important. Hide the notes and write a fourth bullet point.



## Practice Introductions

For essay subjects, take a past exam question and practice writing effective introductions and conclusion. Look back at your notes and remind yourself of the important things to remember. Practice for different topics, texts and papers.



## Thinking hard: Connect

For each subject, consider the exam paper and group together questions that require the same technique to answer. Write down the requirements for each type. Find a previous example you have completed and identify where you've met the criteria.



## Thinking hard: Transform

Read a paragraph from your notes or a text book, and transform it into a diagram, chart or sketch – no words allowed. OR Look a diagram in science, for example, and transform it into a paragraph of explanation.



## Key vocabulary

For a particular topic, make a list of key vocabulary, then do the following: define each word; use each term in a sentence; create a question where the key word is the answer; identify other words which connect to each of the words in your list.

# 9 Ways to Beat Revision Stress

by @inner\_drive | [www.innerdrive.co.uk](http://www.innerdrive.co.uk)



**Do the actual work – revise!**



**When really stressed, talk to someone about it**



**Get some fresh air each day**



**Stick to regular meal times**



**Do something to switch off an hour before bed**



**Don't dwell on worst case scenarios**



**A good sleep the night before is better than last minute cramming**



**Once you've done the exam, move on to the next one**



**Don't aim for perfection – it's a myth and doesn't exist**