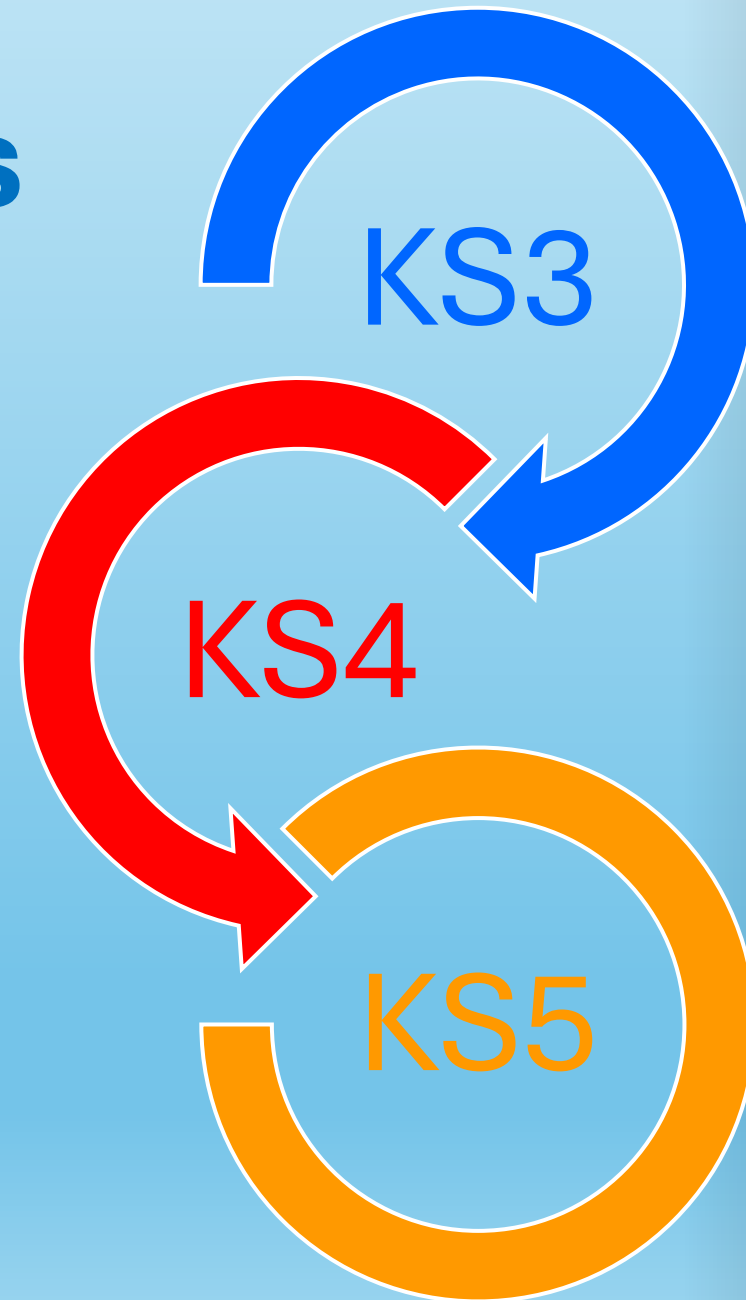


Learning pathways Year 11

Ace your exams?

The objective of this session is straightforward – to arm you with practical and easy-to-implement strategies that can transform your study routine.



Why do study habits matter?

- Developing good study habits is more than just a routine; it's about creating a system that works for you. It involves
 - organizing your time,
 - setting realistic goals, and
 - employing techniques that enhance your understanding and retention of the material.





One size
does NOT fit all

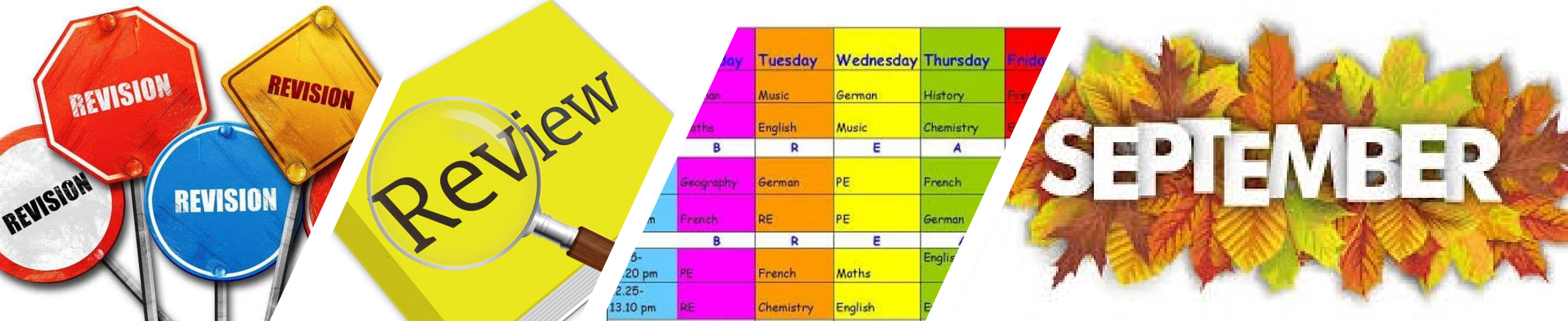
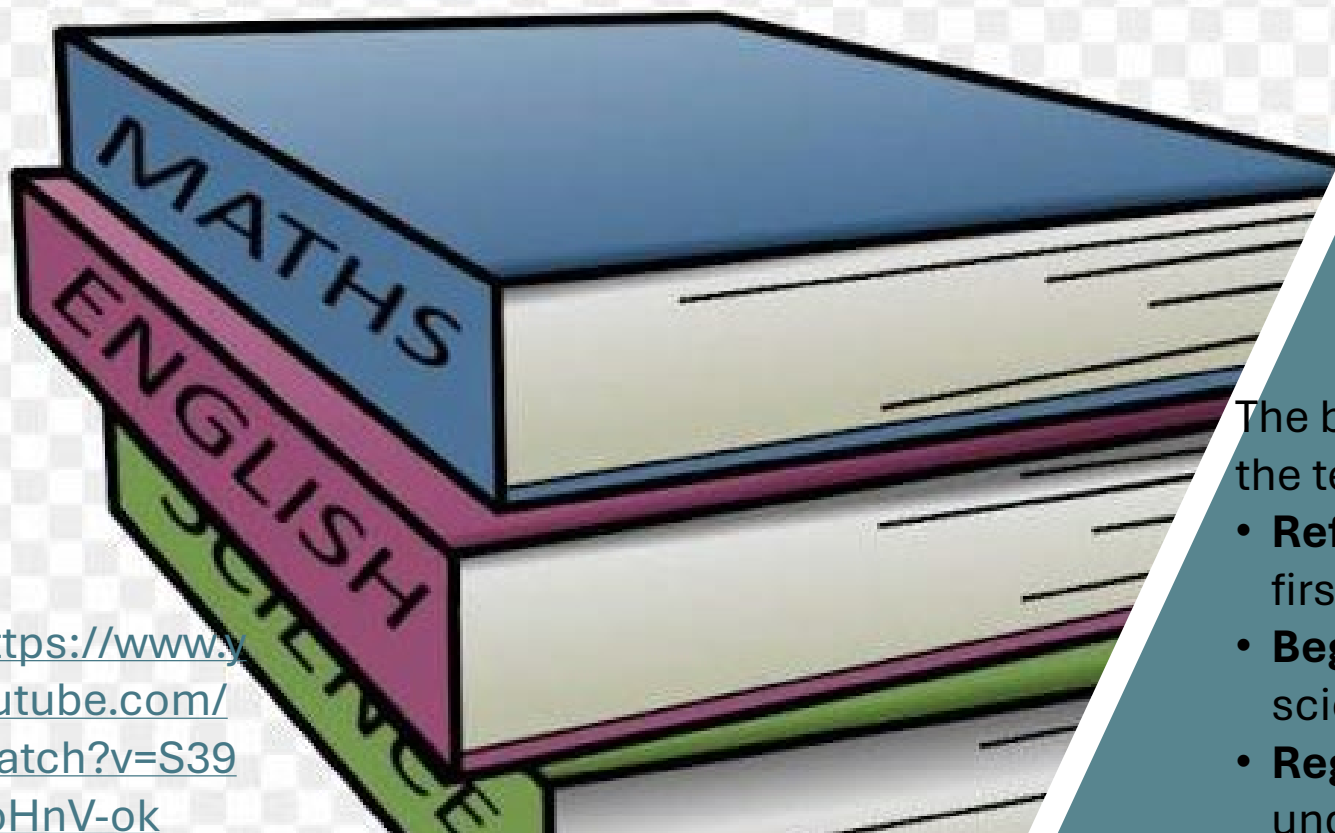


A vital factor to consider is that we all learn in different ways and that it is **really** important to identify what works for you. It may be that you identify singular or a combination of approaches, but it is an active process that is important for you and your parents to engage with.

<https://www.youtube.com/watch?v=I5HDfBubAjl>



https://www.youtube.com/shorts/RQx0mV_1hHU



<https://www.youtube.com/watch?v=S39zoHnV-ok>

Constant review

The beginning of Year 11 is all about building on/improving the techniques you developed in Year 10.

- **Refine your study timetable**, focusing on core subjects first.
- **Begin intensive revision** of topics from Year 10 and Y9 for sciences.
- **Regularly update and review notes** to ensure clarity and understanding.

Designing sticky timetables

- Research carried out by Douglas Barton (What do top students do differently? TEDxYouth) shows that practice of exams has the biggest impact on exam performance. However, another high impact activity was designing and sticking to a revision timetable. <https://www.youtube.com/watch?v=Na8m4GPqA30>

The trouble is, huge proportions of students don't stick to the schedule they've designed. Interviews of the students suggest that they abandon timetables because they design them incorrectly.

- So, what's the mistake they make? They begin by putting in the slots where they are going to work and then try to fit real life around these sessions.
As a result, these students create days and weeks that are dominated by revision and activities that might bring them joy, happiness, relaxation or connection are squeezed out. It becomes impossible to sustain and soon the timetable is consigned to the bin.

Designing Sticky Timetables

We think there are five things for you to focus on to create a successful timetable.

- 
- Before you start you will need a template to plan your time...
 - Once you have your template add all the compulsory time, i.e. lessons, travel, etc

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M													
T													
W													
Th													
F													
Sa													
Su													

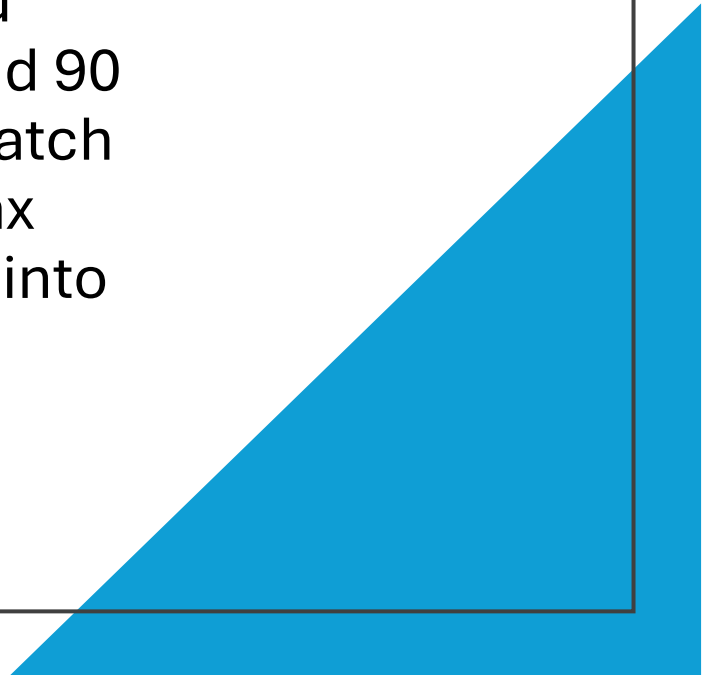


	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M	The grey squares represent mealtimes and travel time												
T	Red	Red	Red	Red	Grey	Red	Grey		Grey				
W		Red		Red	Grey		Grey				Grey		
TH	Red	Red	Red		Grey	Red	Grey		Grey				
F	Red		Red	Red	Grey	Red	Grey				Grey		
SA					Grey					Grey			
SU	The red squares represent lesson time.												

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M													
T													
W													
TH													
F													
SA													
SU													

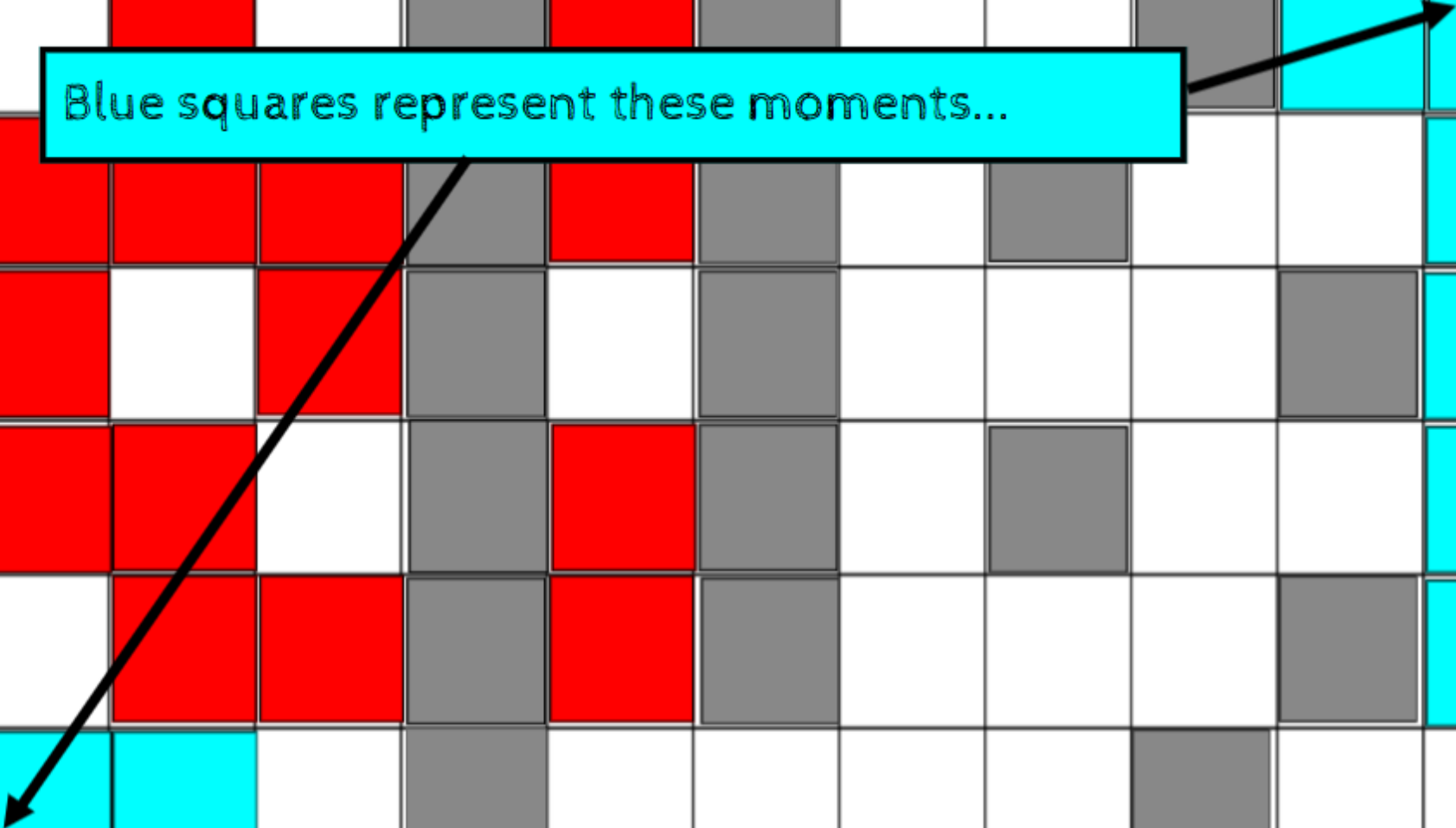
1. Start by putting
in key moments of
connection, joy
and relaxation

- Aim for five or six moments of between one and two hours totalling about 10-12 hours when you're doing something rewarding consider taking part in sports going to the gym watching something on TV meeting up with friends a shift in a part time job.
- Organise these so they're not happening all at once you might have an hour on a Monday when you meet a friend 90 minutes on a Wednesday when you watch a football match or an hour on a Thursday when you go for a run and relax pizza night on Friday a period of time on Saturday to go into town



	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
<i>M</i>													
<i>T</i>													
<i>W</i>													
<i>TH</i>													
<i>F</i>													
<i>SA</i>													
<i>SU</i>													

Blue squares represent these moments...



	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M													
T													
W													
TH													
F													
SA													
SU													

2. Organise work
slots around
relaxation.

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M													
T													
W													

An example timetable showing 10 hours of independent study. The green squares represent time for independent study. In this example it is easy to meet 10 hours:

- 2 hours during study periods.
- 2 hours three times a week.
- 2 hours on Sundays.

- it could be the figures I've mentioned here aren't quite right for you and that's fine with each completed week you've got a chance to redesign this is going to be a flexible and constantly changing document that responds to your progress and your energy levels

4. Run it through once, then adjust.

[illegible]



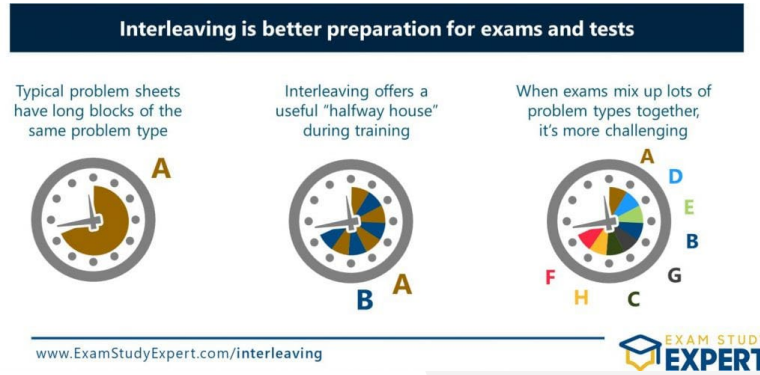
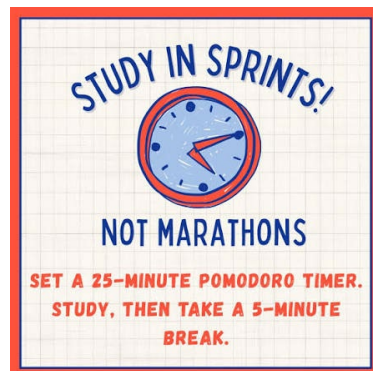
- 1-2 hours per day during the term
- 2-3 hours closer to exams,
- 3-4 hours during the final weeks.

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M	Red		Red		Grey	Red	Grey						
T	Red	Red	Red	Red	Grey	Red	Grey		Grey	Green	Green	Cyan	
W	Green	Red		Red	Grey		Grey	Cyan	Cyan				
TH	Red	Red	Red	Green	Grey	Red	Grey		Grey				
F	Red		Red	Red	Grey	Red	Grey	Green	Green	Cyan			
SA									Green	Green	Cyan	Cyan	Cyan
SU	Cyan	Cyan					Green	Green			Cyan	Cyan	

How could you adapt to 20 hours of independent study?

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
M	Red		Red	Green	Gray	Red	Gray			Gray	Cyan	Cyan	
T	Red	Red	Red	Red	Gray	Red	Gray		Gray	Green	Green	Cyan	
W		Red	Green	Red	Gray		Gray				Gray	Cyan	Cyan
TH	Red	Red	Red		Gray	Red	Gray		Gray	Green	Green	Cyan	
F	Red		Red	Red	Gray	Red	Gray		Green	Green	Gray	Cyan	
SA	Cyan	Cyan	Cyan		Gray					Gray			
SU							Green	Green		Gray	Cyan		

High impact techniques



- **Remember to include the following High impact techniques**
- 1. Interleave your subjects, topics and techniques instead of using blocked practice, this prevents the illusion of mastery.
- **Start small:** Begin by studying two or three related topics and alternate between them every 20–30 minutes.
- **Mix similar topics:** alternating between geometry and algebra problems instead of finishing all algebra first. cycle through Cell Biology, Genetics, and Ecology in a single one-hour session.
- **Don't give up if it feels hard:** Interleaving makes studying feel more difficult in the short term, but this temporary struggle is exactly what drives long-term learning.
- For your next subject use a different revision technique. So, if you have just completed a mind map for cell biology, use past paper question practice for Maths.
- 2. Space your subjects and topics out. Plan to **revise a topic in detail** in your first session, then a week later complete a **deep review** of the same topic and 2 weeks later complete a **quick review of the topic**.
- 25-minute sprints 'Pomodoro technique' (using a timer to chunk down your revision sessions between short 5 minutes breaks)

- 

5. Ignore the setbacks.

	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10
<i>M</i>	Red		Red		Grey	Red	Grey						
<i>T</i>	Red	Red	Red	Red	Grey	Red	Grey		Grey	Green	Green	Cyan	
<i>W</i>	Green	Red		Red	Grey		Grey	Cyan	Cyan				
<i>TH</i>	Red	Red	Red	Green	Grey	Red	Grey		Grey				
<i>F</i>	Red		Red	Red	Grey	Red	Grey	Green	Green	Cyan			
<i>SA</i>									Green	Green	Cyan	Cyan	Cyan
<i>SU</i>	Cyan	Cyan					Green	Green			Cyan	Cyan	

SUPERCHARGED REVISION PLAN

Day	Subject(s)	Topic(s)	How?	When?	How well you think you will do Effectiveness
M					
T					
W					
T					
F					
S					
S					

- To super charge you plan, try adding an hour to plan the following week in detail.

- I recommend 3 headings to ensure you are well-prepared and maximised the time spent in each revision session

Normal revision session plan

SUPERCHARGED REVISION PLAN

Day	Subject(s)	Topic(s)	How?	When?	How will it be Effective?
M					
T					
W					
T					
F					
S					
S					

"Supercharged" session plan

day	subject	topics	how	when	How will it be effective?
M					
T					
W					
TH					
F					
SA					
SU					

-
- <https://www.youtube.com/watch?v=Na8m4GPqA30>



FINAL THOUGHTS



- Have a go at designing one for yourself now.
- You don't need anything fancy and the internet is bursting with templates.
- And anyway, as you know, it's not the template that's going to make a difference.
- Just remember the four steps...
 1. Start by putting in some key moments of connection, joy and relaxation into your week.
 2. Now begin to organise the work-slots around these periods of relaxation.
 3. Mentally rehearse the week, thinking about 'mission and 'medal'.
 4. Run it through once, then adjust.

Deepen understanding

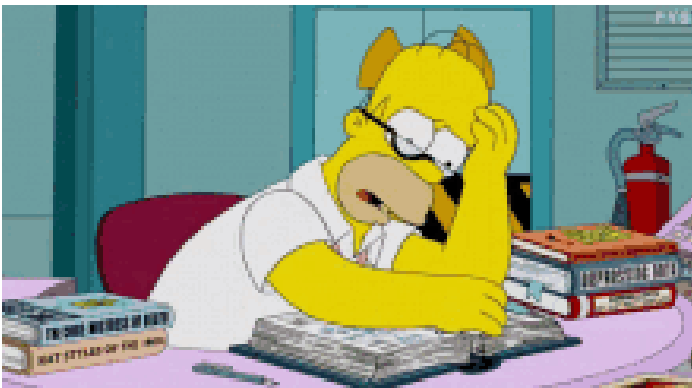
- **Deepen your understanding** of key topics in your subjects.
- **Schedule regular study sessions** throughout the term to review your notes.
- **Use past papers** to get accustomed to exam formats and question styles
- **Employ various study techniques**, such as flashcards, mind maps and online resources.
- **Attend extra support sessions** or revision workshops when available.

<https://www.youtube.com/watch?v=TUoJc0NPajQ> Memory



Using Past Paper Questions and Mark Schemes

Do → Mark → Fix → Repeat

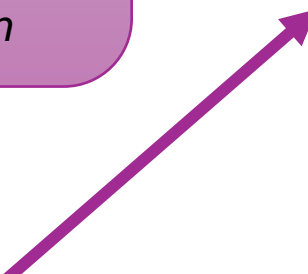


Exam Skills – it's not just all about knowledge!

*These are your shorter answer questions where you need to revise and **recall** the information*



Assessment Objective	Approx Exam weighting
AO1: Demonstrate knowledge and understanding	40 %
AO2: Apply knowledge and understanding	40 %
AO3: Analyse information and ideas to: interpret and evaluate ; make judgments and draw conclusions ;	20 %



*These require you to **understand** what you know and to interpret new information. You can improve this through **practise**.*

Using Past Paper Questions and Mark Schemes

1. Start **after** you know the basics

Past papers work best once you've:

- Covered the topic in class
- Done some previous revision and understood key ideas

2. Use topic-based questions first

Before full papers:

- Find **questions by topic** (e.g. "GCSE Maths algebra questions")
- Do **5–10 questions** on one topic at a time

This helps you spot:

- Weak topics
- Common question styles

3. Do questions *properly* (no notes)

When practising:

- No notes or textbook
- Write full answers (especially for English, Science, Humanities)
- **Set a mini time limit** (e.g. 1 mark = ~1 minute)

*This trains **exam skills**, not just memory.*

4. Mark using the **mark scheme** (*this is the **MOST important bit***)

Don't just check if you were "right or wrong".

- Read the **examiner's wording**
- Ask: *What did they want that I didn't write?*



Use a different colour pen to add:

- Missing keywords
- Better phrasing
- Correct working

Using Past Paper Questions and Mark Schemes

5. Redo the question (or a similar one)

A few days later:

- Redo the same question **from memory**
- Or try a similar one on the same topic

If you improve → revision is working 

6. Save full past papers for closer to exams

When exams are near:

- Do full papers under timed conditions
- **Simulate the exam** (quiet room, no phone, only access arrangements you are normally allowed)
- Review every mistake after

Quality > quantity.

A note about **Feedback**:

- Focus on what can be improved and how
- Don't focus on disagreeing with the mark scheme or examiner
 - Marks are awarded in exams for **specific** skills and terminology, being similar to the mark scheme or being too vague will not get you marks
- Feedback from tests and homeworks are an opportunity to improve your exam skills

Do → Mark → Fix → Repeat

(d) “The biblical account of creation is a metaphor.”

Evaluate this statement considering arguments for and against.

In your response you should:

- refer to Christian teachings
- reach a justified conclusion.

From the 2018 Christianity paper

Do

TASK: In your work booklet, bullet point 2 or 3 points to agree and 2 or 3 reasons to disagree

What does the mark scheme say in terms of content..?

Mark

AO2

Arguments for the statement:

- ☐ The scientific explanation of the creation of the universe can be accepted if the description in Genesis is regarded as metaphorical, and scientific theories have evidence to support them
- ☐ Metaphorical explanations support the creative power and spiritual importance of God as creator, without causing difficulty in understanding how creation could take place in 6 days
- ☐ It is difficult to have a literal understanding of the time period. Does ‘day’ literally mean 24 hours?

Arguments against the statement:

- ☐ There are other understandings of the Genesis creation which mean it might not be metaphorical, some believe that God being omnipotent could create as the Bible describes
- ☐ The Bible use of the word days could possibly refer to periods of time, then the story ceases to be metaphorical and becomes easier to understand as it is supported by evolutionary evidence
- ☐ To describe the Genesis creation as metaphorical means it is a ‘story’ or ‘allegory’ Christians who perceive the Bible as God’s word would say this is disrespectful and lacking in understanding of God’s nature.

How would you evaluate your evidence? (Remember you cannot score more than 6/12 without evaluation)

In your booklet, suggest why one side of the argument is more credible than the other

The exam board might suggest...

Fix

- More credible because the evidence is based on Biblical teaching, the highest authority for religious believers.
- More well-grounded because the evidence reflects unity among believers.
- Stronger evidence because it has value for both religious and non-religious people.
- Less credible because the evidence is not believed by all Christians
- Less valid because the evidence is based on personal opinion rather than religious teaching.
- Weaker because the Bible cannot always be interpreted literally.

What mark would you give this and how would you fix it?

Fix

“The biblical account of creation is a metaphor.”

Creation is when the Bible describes how God made the world in seven days. I agree with the statement.

One reason I agree is because it is impossible for anyone to create the world in one week. Also, science tells us that the world was made by the Big Bang so the Bible is wrong and should not be taken literally. Christians should believe that God made the world, but they shouldn't believe the time frame of one week.

Other people may disagree because the Bible says the world was made by God in seven days so this should be believed. We can see evidence for creation in the world today as the Bible describes so it should be taken literally.

In conclusion, I agree because of the reasons I have said.

This would get 3/12.

Fix?

- The evidence is not well developed.
- Further evidence is needed on both sides of the argument
- There is no evaluation explaining why one side is more credible than the other
- The conclusion is not 'fully justified'

Subject specific examples

Physics

Last century, scientists used evidence from the alpha particle scattering experiment to develop a new model of the atom.

In the experiment, alpha particles were directed towards a piece of gold foil.

(a) What does an alpha particle consist of?

(1)

(b) A gold atom has the symbol $^{197}_{79}\text{Au}$.

How many neutrons are there in this gold atom?

Number of neutrons =

(1)

Do

Answer these questions in your booklet – these are 1 mark **recall** questions.

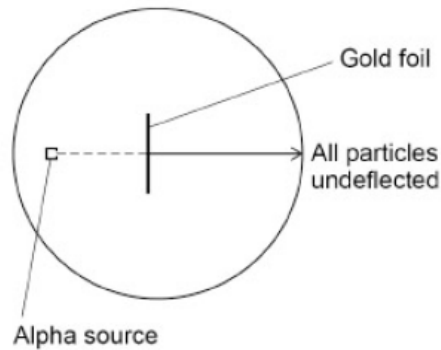
Subject specific examples

Physics

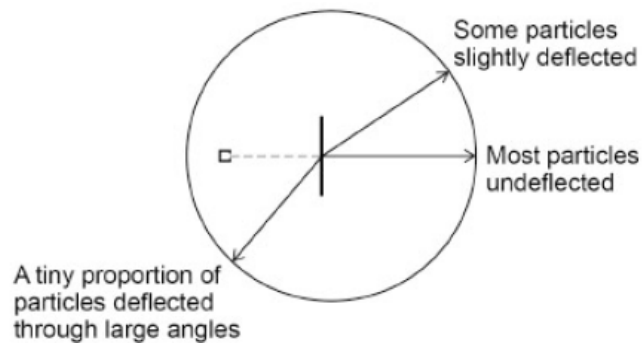
The alpha particle scattering experiment led to the plum pudding model of the atom being replaced by the nuclear model.

The figure below shows the results predicted by the plum pudding model and the actual results from the alpha particle scattering experiment.

Results predicted by plum pudding model



Actual results from the experiment



Describe how the actual results led to the plum pudding model of the atom being replaced by the nuclear model.

You should include details of the plum pudding model and the nuclear model of the atom.

- Read through the 6 marker.
- What is the question asking you? What command words are used?
- What keywords do you think you should include?

Subject specific examples

Physics

Describe how the actual results led to the plum pudding model of the atom being replaced by the nuclear model.

This response is at the top of Level 1, **gaining 3 marks**. There is a description of the plum pudding model, but the description of the nuclear model lacks any detail about the massive and charged nature of the nucleus. Had the answer also included some detail about the nucleus or referred to how the actual results led to the rejection of the plum pudding model, the answer would have been in Level 2.

porting empty space and the electrons resided in shell orbiting the nucleus.

- Compare these two answers
- Which one do you think is worth more marks and why?

Describe how the actual results led to the plum pudding model of the atom being replaced by the nuclear model.

You should include details of the plum pudding model and the nuclear model of the atom.

[6 marks]

• The ~~plum~~ plum pudding model was a solid sphere of positive charge, with negatively charged electrons throughout.
• Some alpha particles passed straight through, showing

The statement that some alpha particles were deflected by electrons is incorrect, and there is no mention of the nucleus being massive.

However, taken as a whole, there is a reasonably detailed description of the plum pudding model, relevant points made about how the evidence led to the nuclear model, and a reasonably detailed description of the nuclear model, which was enough to allow this student to gain the **maximum mark of 6** on this question.

orbiting it and the rest is mainly empty space.

Mark

Subject specific examples

Physics

Your turn to write an answer for the 6 mark question in your workbooks, then use the mark scheme to give yourself a mark.

Do → Mark → Fix → Repeat

Level 2: Scientifically relevant facts, events or processes are identified and given in detail to form an accurate account.

4–6

Level 1: Facts, events or processes are identified and simply stated but their relevance is not clear.

1–3

No relevant content

0

Indicative content

Plum pudding model

- the atom is a ball of positive charge
- electrons are embedded in the ball

Reasons why the plum pudding model was replaced

- the results were not correctly predicted by the plum pudding model
- the plum pudding model did not predict that some particles would be deflected
- the large angle deflections suggest that the atom contains a nucleus
- all deflections suggest that the nucleus is charged
- most alpha particles were not deflected suggesting that atoms are mostly empty space

Nuclear model

- mass is concentrated in the nucleus
- the nucleus is charged
- the atom is mostly empty space
- electrons orbit the nucleus in the nuclear model

