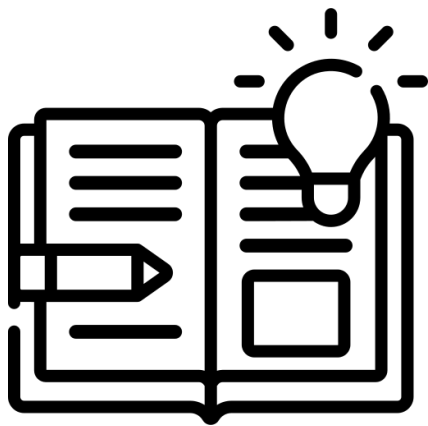




Effective study strategies



Making the most of your revision time

What doesn't work?

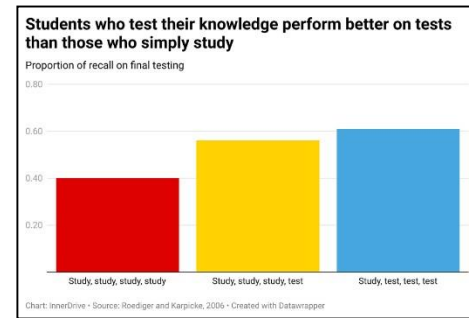


Re-reading notes and highlighting key points

According to research, 84% of students admit to using this technique to revise, and 55% claim it is their favourite technique. But is it really effective? Reading a whole chapter of a textbook, or reading through 3 previous essays, is quite a lot of work, so surely it's beneficial? But how much do you actually remember the next day, next week, next month?

What does the research say?

A study in 2006 (*Roediger and Karpicke*) compared the learning of three groups who used a combination of re-reading and retrieval practice to prepare for a test. When asked, those who just relied on re-reading *believed* it was an effective strategy for learning and felt really confident about the final test. The results said the opposite, though - those who used retrieval practice did at least 30% better in the final test.



Another study in 2016 (*Smith et al*) took similar groups and subjected half of them to stressful environments before testing how much they could remember. Students who had just re-read their notes performed 32% worse in stressful situations, whereas students who had used retrieval practice were not negatively affected by increased stress. This is clearly beneficial in exam situations.

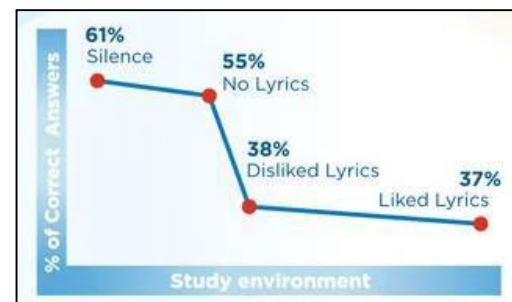


Listening to music when revising

Music can be beneficial for certain tasks - it can improve our mood, boost our motivation and increase creativity. But is it helpful when revising? According to research, 47% of students believe music helps them concentrate and 29% claim it keeps them calm.

What does the research say?

A 2014 study (*Perham and Currie*) compared four study groups: one group working in silence; another revising to songs they liked; a third group revising to songs they didn't like; the final group listening to music without lyrics. Those revising in silence performed significantly better than those listening to songs with lyrics, and it made no difference if they liked the songs!



Despite what many students think, listening to your favourite songs is not the best way to revise; music takes up processing space in the brain, leaving less space to process revision materials.



Lots of testing – also known as retrieval practice – done in silence, is the best strategy when revising.

How can you make this even more effective? Read on...

What does work?

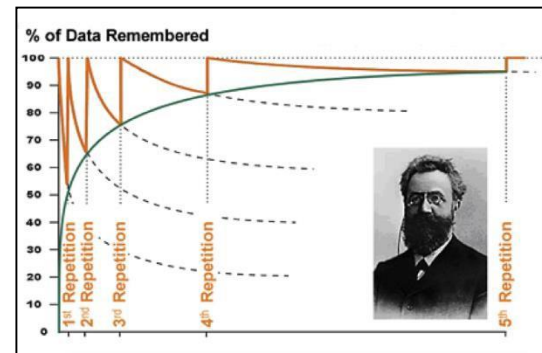


Retrieval practice

Retrieval is trying to remember information you have previously learned, so you can access it easily at a later date. When we are asked a question, our brain makes connections to other things we know. By repeating the question regularly, those connections are strengthened, and eventually the information transfers to our long term memory.

What does the research say?

This is one of the most extensively researched areas of learning - dating back to Ebbinghaus in 1885. If we only learn something once, we are more than likely to forget it; we need to force ourselves to remember and re-learn the information if we want to cement it in our long term memory. Look back at the study on the previous page – those students who self-tested 3 times before the exam were far more successful than those who just re-read the text.

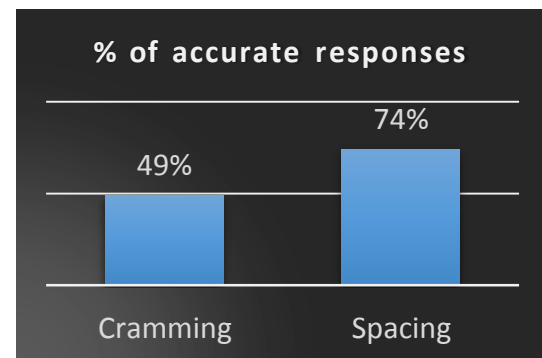


How can you make it even more effective?



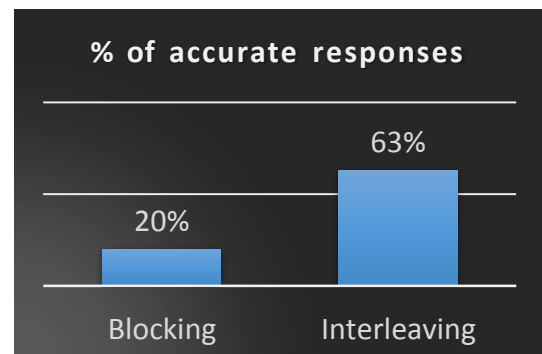
Spacing

Cutting up your revision into smaller chunks and spacing them out over a period of time is much more beneficial than cramming an entire subject in a day. An hour of Physics each day for 5 days is much more effective than 5 hours in one day.



Interleaving

To improve your results further, also consider interleaving. This is where you mix up the subjects and topics you revise: 30 minutes of Shakespeare, 30 minutes of algebra, 30 minutes of Poetry, 30 minutes of Ratio - rather than an hour of English and an hour of Maths.



A 2007 study (*Rohrer and Taylor*) found that students who spaced out their revision over a week, compared to one sitting, achieved a much higher average mark in their final exams. In a second study, students were given a mock test after blocking or interleaving and another test a week later. Even though blocking was effective in the mock test the next day, the students who used interleaving did considerably better a week later in the final exam.

CONSIDER THE POMODORO TECHNIQUE



Set timer for 25 minutes
Work on task – no distractions.
Take a 5 minute break and start again.

Repeat x 4



Retrieval strategies



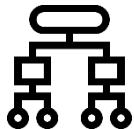
Brain dump*

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 to fill the gaps without the notes. Check your notes a third time and add the missing information.



Flash cards

Write flashcards for each topic, in all subjects. Keep your flashcards simple – one question, one answer per card. Then turn to the blank side and write out what you can remember. Anything that has been forgotten should then be filled in a different colour pen.



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 exam conditions, then check your answers and identify the gaps in your knowledge, so you can target your revision.



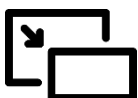
Quizzes

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



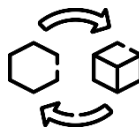
Practise essay plans

For essay subjects, take a past exam question and write out detailed essay plans – e.g. in English Literature this might be a Thesis (argument) followed by three *What, How, Why* plans.



Thinking hard: reduce

Read a section of your notes then put them aside and reduce what you read to 3 bullet points, each one no more than 10 words. Look back at the notes and decide if you missed anything important. Consider a **revision clock** as well**



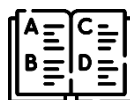
Thinking hard: transform

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



Thinking hard: connect

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



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.

Simple study plan



Step Study Plan

It's never too late to plan your revision!



Make a list

What do you need to know? Break it down into topics and units. When you can retrieve it without effort, cross it off the list. It might help with motivation and organisation to have a 'to do' and 'have done' list.



Timetable a spaced schedule

Look back at the notes about spacing and interleaving. Study each topic little and often and mix up subjects and topics so you are revising a mixture each day. Be sure to leave yourself enough time to cover everything.



Identify the gaps in your knowledge

Having used the retrieval strategies, where are the gaps? What are you confident with? What do you need to go back to? What do you need to study more? Be honest with yourself – don't just focus on what you *do* know.

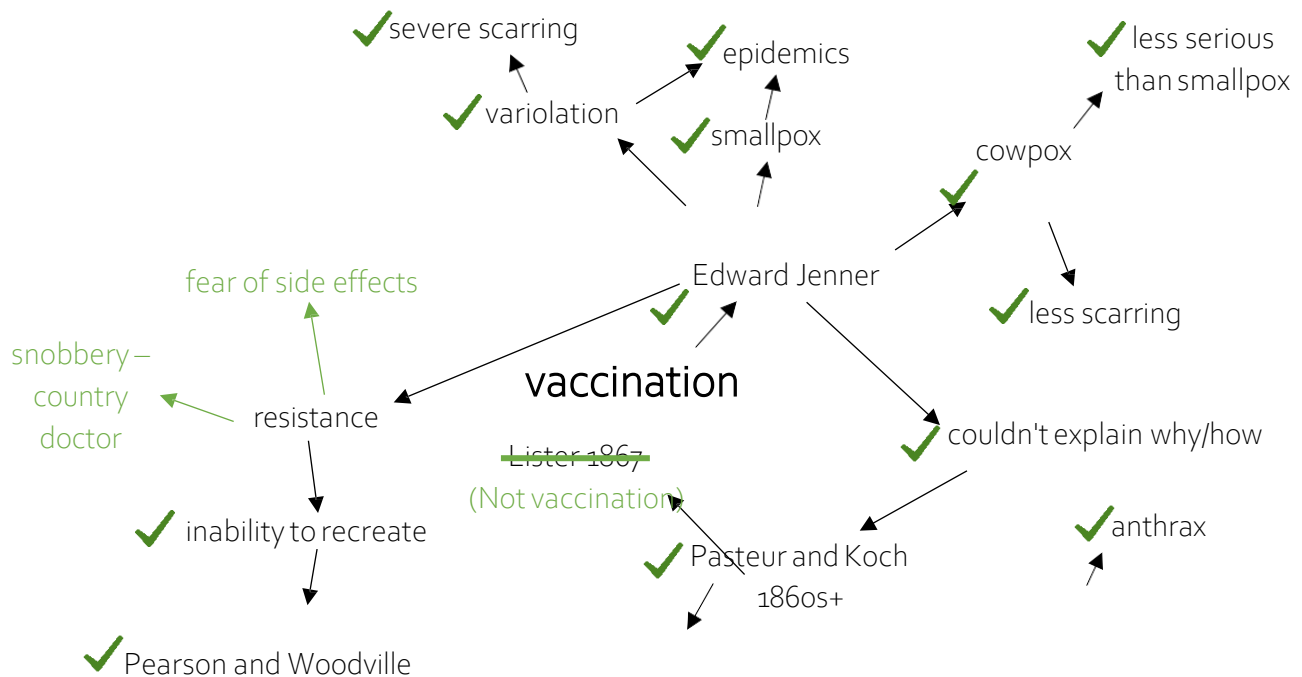


Close the gaps

Repeat the third and fourth steps of the plan until you are confident with everything. Some parts will be difficult, but don't give up. The harder you have to think, the more likely you are to remember in the end. 'Memory is the residue of thought.' (*Dan Willingham*)

Knowledge dumps*

A knowledge dump is when you write down everything you can remember about a topic. They are a useful tool for finding out what you know and where the gaps are in your knowledge.



When writing knowledge dumps:

Do:

- ✓ ...write from memory.
- ✓ ...check what you have written against a textbook | exercise book | revision guide.
- ✓ ...connect information together in a spider diagram format (see below). This will allow you to remember more.

Don't:

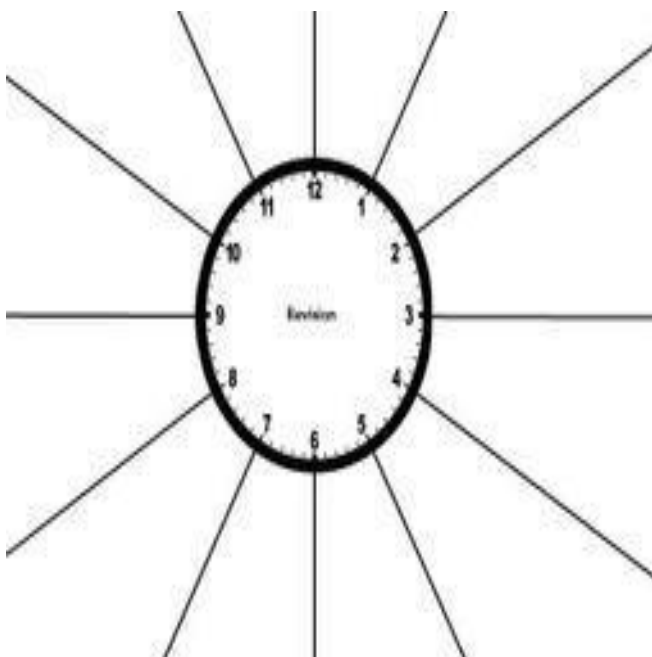
- X ...copy information from textbooks and knowledge organisers.
- X ...assume that everything you have written is correct.
- X ...write a list (see below).

How to write a knowledge dump:

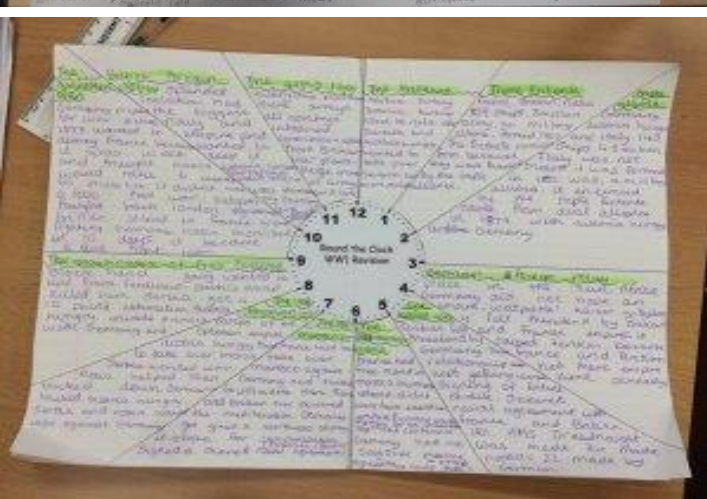
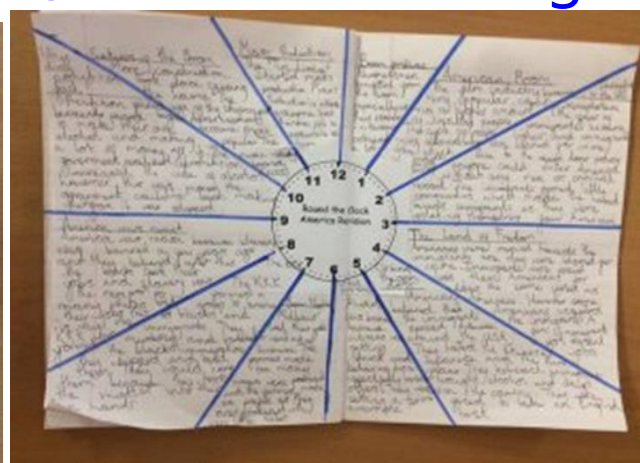
1. Use an empty piece of paper and write the date at the top of the page.
2. Without any support, write down the first thing you can remember about the topic you have chosen. Use single words or phrases.
3. As this fact triggers more information, write those facts down. Connect the facts together with lines or arrows.
4. Once you can't remember anything else about the area you started writing about, try to remember another fact to start another 'web' of knowledge. Stop once you can't remember anything else.
5. Using your exercise book or textbook, check and correct your knowledge using a different coloured pen.
6. Keep your knowledge dump. This will allow you to compare knowledge dumps over time so you can see your success.
7. Note down what you corrected or added. Practise these gaps using flashcards or quizzing.

Retrieval Clock**

- ✓ A way of revising which can break a topic down into 12 (or fewer) sub-categories.
- ✓ Think of a topic in a subject and within that topic 12 sub topics
- ✓ Draw out a revision clock template
- ✓ Give your self two minutes to complete a section to see what you can remember on that topic.
- ✓ Include information, key words or pictures to represent what you can remember.
- ✓ Do the same for the other 11 sections
- ✓ Here is an example of a revision clock that has been made for chemistry revision



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



What else helps?



Get some sleep

How many hours of sleep do you get each night? On average, teenagers claim to get 6-7 hours a night, when they should really be aiming for 9-10 hours. If you are only getting 6-7, you are depriving yourself of over 1000 hours of sleep each year. You must be exhausted!

What does the research say?

Put very simply, we experience two types of sleep: deep sleep, which helps our body to recover; and REM, which helps restore our mind. Without enough REM sleep, you are much more prone to anxiety, stress, lack of concentration, mood swings and poor decision making.

A 2009 study (*van der Helm and Walker*) found a 40% reduction in memory when sleep deprived. Not only that, but you are more likely to forget positive memories when tired, just recalling and retaining negative memories. Excessive sleep loss therefore impacts on our mental health and stress levels.



Limit your screen time

Mobile phones can be great tools for learning but are they having a negative impact on your learning? Catching up with friends, social media, movies and box sets is great – but when is the best time to do these things?

What does the research say?

A 2018 study (*Thornton et al*) found that just having a mobile phone nearby can lead to a 30% reduction in attention, concentration and performance.

Another study in 2016 (*Wood et al*) found that the glare from phones and iPads tricks our brain into thinking it is daytime, therefore stopping melatonin (the sleep hormone) being triggered. Two hours on your phone or iPad at night results in 20% less melatonin being released. At the very least, dim your screen prior to bedtime - or better still, don't use it at all.



Look after yourself

Being kind to yourself each day can have a big impact on your performance during revision and exams. Take a break and get some exercise. Aim to start the day with cereal or toast – but be sure to treat yourself later on in the day. Find time to do the things you love. Reward yourself for your hard work.

What does the research say?

A range of studies in 2016 (*Miller and Krizen*) found that students who took a 12 minute walk reported a 20% increase in happiness, attentiveness and confidence, compared to those who spent that time sitting down. Even taking a 5 minute walk resulted in similar benefits. Break up your study sessions with a quick stroll and see for yourself

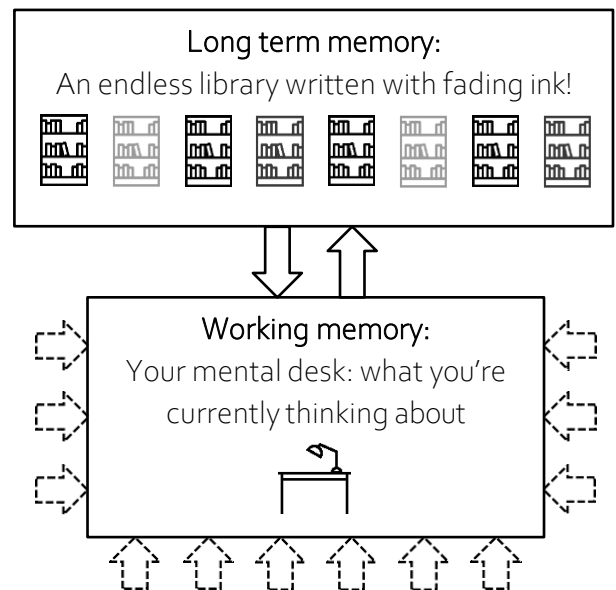
ACTION PLAN

Where should I work and revise?

When you revise effectively, you pull information from your long term memory and strengthen it in your working memory. You may also be finding gaps in your long term memory and closing them by thinking hard about new information in your working memory.

Your working memory can only hold a small amount of information at once. In order to revise and learn effectively, you should use techniques which stop your working memory from becoming overwhelmed.

Anything that you are currently experiencing or paying attention to takes up space in your working memory. One way that you can free up space in your working memory is by working in an environment which is free from distractions.



When creating a space to revise...

Do:

- ✓ ...work in a tidy environment where you have the tools you need to revise effectively.
- ✓ ...work in a quiet environment.
- ✓ ...put your phone in another room or use an app on your phone which blocks social media.
- ✓ ...work in a space which you only use for home study, schoolwork or revision.

Don't:

- X ...work in a cluttered environment.
- X ...distract yourself with (loud) music or noise.
- X ...work near your phone or other devices which can access social media.
- X ...work in the same space where you relax.

An example of an effective revision space:

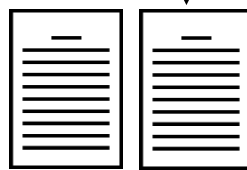


A quiet environment, such as a classroom or library

Put your phone on silent if you will need to use it or put it in another room.



The resources you will need to revise using your chosen method



A drink, such as a glass of water



The pens and pencils you will need to revise

A chair which is similar to the chair you use at school (not a sofa or bed)

Where do you normally do your home study and your revision?

Use the scorecard below to rate the quality of your learning environment:

	/1
My chosen environment is quiet (e.g. There is no music playing and there are no conversations happening in the background.).	
I am unlikely to be disturbed in my chosen environment (e.g. It is unlikely that I will be asked to move so the table can be used for something else.).	
I only use my chosen environment for home study or revision.	
I don't have my phone with me while I complete my home study.	
I don't have other possible distractions near me when I complete my home study (e.g. games consoles).	
I use a desk which is similar to the desk I use in lessons.	
I have an office chair or a chair which is similar to the chairs I use in lesson (not a sofa or bed).	
I usually have the equipment I need with me when I complete home study (e.g. a computer)	

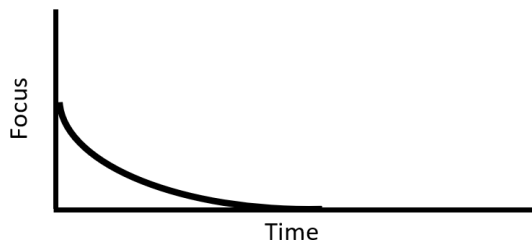
6-8	This is likely to be a positive learning environment. Working in this environment will allow you complete your home study and revision effectively and efficiently. In theory, this will mean that you will have more time for yourself to relax.
3-5	This is likely to be a reasonably positive learning environment. However, it is still likely that you will be distracted while you are completing home study and revision. This will mean that it may take you longer to complete home study and you may need to complete more independent revision than expected in order to be successful. You should make some tweaks to your learning environment.
0-2	This likely to be an ineffective learning environment. Working in this environment may mean that you have to spend a lot more time to complete your home study and revision. It may also mean that you complete your home study and revision to a much lower quality, meaning you will have to do more revision in order to be successful. You should make some major changes to your learning environment.

Give one improvement which you are going to make to your learning environment to make it more effective:

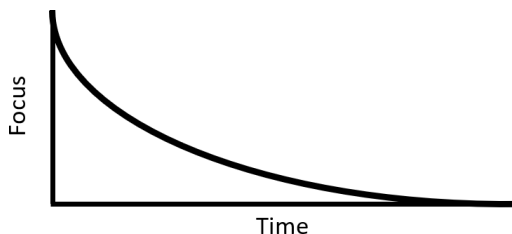
When should I revise?

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.

Revising when you are tired:

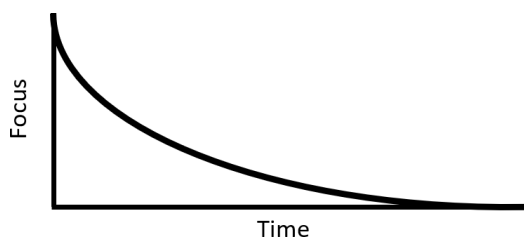


Revising when you are well-rested:

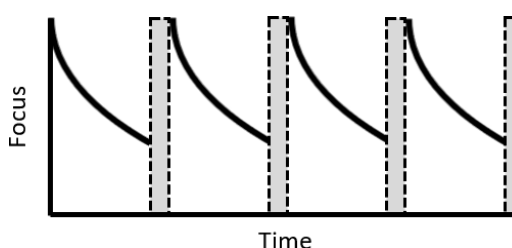


You should also take regular breaks when you revise. These breaks can be structured using a method called the Pomodoro technique.

Revising without a break:



Revising with small regular breaks:



When revising:

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:

- X ...depend on when you *want* to revise.
- X ...revise late at night or when you are tired.
- X ...try to force yourself to work for long periods of time without a break.

Planning revision sessions using the Pomodoro Technique:

1. Choose a time when you are well-rested and used to working.
2. Decide the specific task you are going to complete (e.g. I will complete a Science revision module about electrolysis of aqueous substances).
3. Set up your study area (See "Where should I revise?").
4. Decide on how many 25-minute slots you will need to complete the task you have decided to complete.
5. Remove your phone and any other distractions from your working space.
6. Set a timer for 25 minutes. Ideally use a digital timer which is *not* on your phone.
7. Spend the *entire* 25 minutes working. If you have spare time at the end, start another task.
8. When the timer goes off, leave your working area and take a 5-minute break.
9. Repeat. Take a longer break after every 3 25-minute sessions.

Answer the questions below to see how easily you will be able to use the Pomodoro technique:

1. Do you have a clock or a timer which would allow you to time Pomodoros without using your phone?	
If you said "no", you should either purchase a kitchen timer or consider using the Flora app – which can help you avoid distractions.	

2. Do you rely on your phone to complete online home study and revision, such as Sparx or One Drive?	
If you said "yes", you should use a laptop to complete your home study and revision; this will mean there is a much lower risk of getting distracted.	

3. Who could you give your phone to while you complete Pomodoros?	
If you said "I don't know" or "no one", consider asking your parents or close friends. If you would rather not give your phone to these people, you should consider the Flora app or stay back in school to revise; you aren't allowed to use your phone in school anyway and, if needed, you could give your phone to a teacher.	

4. Do you have a positive learning environment? (See 'Where should I work and revise?')	
If you said "no", you should return to the "Where should I work and revise?" and follow the guidance to create a positive learning environment. If you can't create a positive learning environment at home, you should complete your home study and revision in school; we can look into keeping the LRC open for you.	

5. When do you do your home study and revision? (e.g. "When I've finished gaming for the night" or "As soon I get home")	
If the time when you study does not have a set routine or if you've said that you do your home study whenever you've done everything else you want to do, you should set yourself a specific time for home study and revision. Ideally, this should be as soon as you get home; your brain will still be in 'school mode', making it more likely that you will be productive.	

Give one thing which you are going to do to make it likely that you will revise using Pomodoros:

How do I decide what to revise?

Whenever you revise, you are doing one of three things:

1. Finding and closing gaps in your knowledge.
2. Strengthening fading knowledge in your long-term memory.
3. Practising recalling knowledge quickly.

Whichever purpose your revision has, it is important that you focus on the weaknesses within your knowledge. It is tempting to revise topics you're already good at. However, if you do this, you waste valuable revision time and you could get a nasty shock when you don't do well in exams or assessments.

Before you start revising for a subject, you should decide what you need to focus on.

When deciding what to revise:

Do:

- ✓ ...gather information about the topics which you need to revise.
- ✓ ...break subjects and topics down into manageable chunks.
- ✓ ...revise topics which you don't enjoy or which you find difficult.
- ✓ ...keep a record of the topics you have chosen to revise and the revision you have completed for those topics.

Don't:

- X ...spend more time making lists of what to revise than actually revising.
- X ...write down entire subjects or topics as areas to revise.
- X ...revise topics you enjoy or topics in which you are already successful.
- X ...expect yourself to remember the areas which you need to revise.

How to decide what to revise:

1. Use information from a range of sources to find out where your weaknesses are.

What topics **don't** I enjoy or feel success in?

What does my teacher think I need to revise?

What are my weakest areas on platforms like Sparx?

In which topics or questions did I struggle in my last assessment?

2. Create a table of topics and subjects on which you need to focus.

Topic:	Scores:					
Reasons why people migrated West in the 1840s	20%	15%	37%	45%	50%	
The Catholic Church and medicine in the Middle Ages	40%					
Clashes between Norman Kings and the Church	30%	33%				

3. As you complete revision on these topics, fill in your scores. This will allow you to see your success over time.
4. As you become more successful in the areas you have identified, go back to step one. This will allow you identify any gaps in new knowledge or any information which has faded since you made your first list.

Make a list of the topics you need to revise for each subject

[illegible]

Revision Timetable

Week starting: 6th November

day:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
time							
9:00-10:00							break
							break
10:00-11:00							english ★
							english ★
11:00-12:00							science
							science
12:00-13:00							science
							maths
13:00-14:00							maths
							maths
14:00-15:00					english ★		maths
					english ★		maths
15:00-16:00					geography		geography
					geography		geography
	english ★	science	maths	geography	history		geography
16:00-17:00	english ★	science	maths	geography	history	french	french
	break	science	maths	geography		break	french
17:00-18:00	dinner	dinner	dinner	history		dinner	break
	dinner	dinner	dinner	history		dinner	break
18:00-19:00	english ★	science	maths	history		maths	history
	english ★	js	geography	english ★		maths	history
19:00-21:00	english ★	js	geography	english ★		geography	break
	break	break	geography	english ★		geography	break
21:00-onward	sleep	sleep	sleep	sleep		sleep	sleep

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic

- Week Beginning 04.11.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
1 PM - 2 PM							
2 PM - 3 PM							
3 PM - 4 PM							
4 PM - 5 PM							
5 PM - 6 PM							
6 PM - 7 PM							
7 PM - 8 PM							
8 PM - 9 PM							
9 PM - 10 PM							
10 PM - 11 PM							

Key	
	Subject
1	
2	
3	
4	
5	
6	
7	
8	
	Non-study time

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic

- Week Beginning 11.11.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
1 PM - 2 PM							
2 PM - 3 PM							
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5 PM - 6 PM							
6 PM - 7 PM							
7 PM - 8 PM							
8 PM - 9 PM							
9 PM - 10 PM							
10 PM - 11 PM							

Key	
	Subject
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8	
	Non-study time

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic

- Week Beginning 18.11.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
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3 PM - 4 PM							
4 PM - 5 PM							
5 PM - 6 PM							
6 PM - 7 PM							
7 PM - 8 PM							
8 PM - 9 PM							
9 PM - 10 PM							
10 PM - 11 PM							

Key	
	Subject
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7	
8	
	Non-study time

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic

- Week Beginning 25.11.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
1 PM - 2 PM							
2 PM - 3 PM							
3 PM - 4 PM							
4 PM - 5 PM							
5 PM - 6 PM							
6 PM - 7 PM							
7 PM - 8 PM							
8 PM - 9 PM							
9 PM - 10 PM							
10 PM - 11 PM							

Key	
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8	
	Non-study time

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic

- Week Beginning 02.12.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
1 PM - 2 PM							
2 PM - 3 PM							
3 PM - 4 PM							
4 PM - 5 PM							
5 PM - 6 PM							
6 PM - 7 PM							
7 PM - 8 PM							
8 PM - 9 PM							
9 PM - 10 PM							
10 PM - 11 PM							

Key	
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	Non-study time

NOW WRITE YOUR OWN REVISION TIMETABLE – it has to be realistic. MOCKS BEGIN!

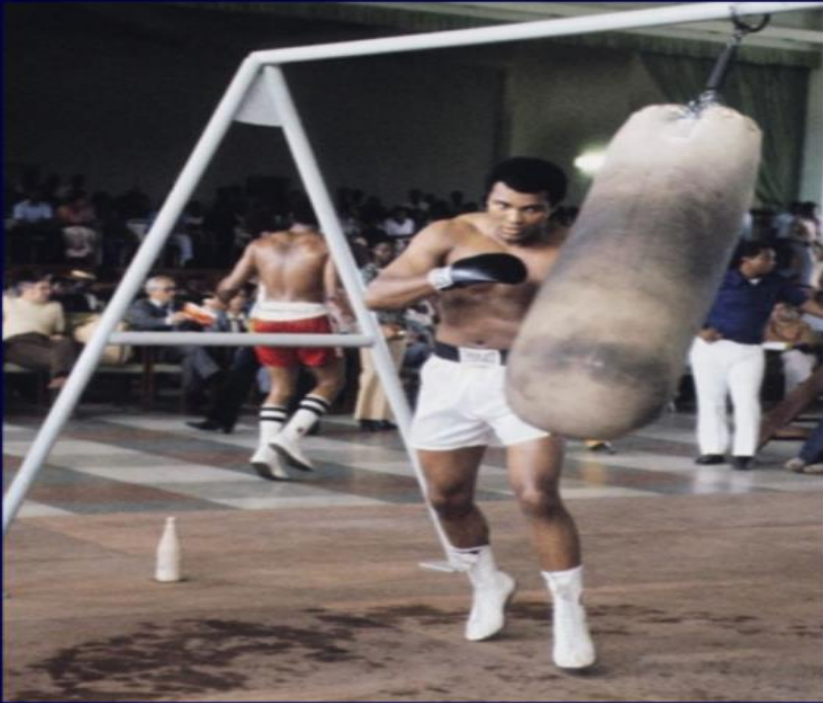
- Week Beginning 09.12.2024

Week ____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 AM - 8 AM							
8 AM - 9 AM							
9 AM - 10 AM							
10 AM - 11 AM							
11 AM - 12 PM							
12 PM - 1 PM							
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10 PM - 11 PM							

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	Non-study time

GOOD LUCK

"The only place where success comes before work is in the dictionary." – Vidal Sassoon



**“THE FIGHT IS WON OR
LOST FAR AWAY FROM
WITNESSES – BEHIND
THE LINES, IN THE
GYM, AND OUT THERE
ON THE ROAD, LONG
BEFORE I DANCE
UNDER THOSE LIGHTS”
Muhammad Ali**

