

Year 10/11 GCSE Revision





Revise!

Learning Objectives

- To **understand** how your memory works
- To introduce you to **proven** study skills and tools, telling you **what** works (*and why!*)
- To **teach** the practical skills to maximise the impact of your revision time
- To build your confidence in revising –so you know it makes a difference and helps you!

How does your memory work?

Stage 1: Sensory Memory

We are bombarded with huge amounts of information all the time through our senses.

Think about it, what can you see, feel, smell ... right now?



Most of this information is ignored and we don't pay attention to it, therefore we don't remember it.

How does your memory work?

Stage 2: Working Memory

When we pay attention to our sensory memory, we give ourselves the chance of learning something.

So to learn, you have to PAY ATTENTION.

However, even when we do
pay attention to information most of it
will be forgotten unless we do something with
it.



Note to Self:
Pay Attention

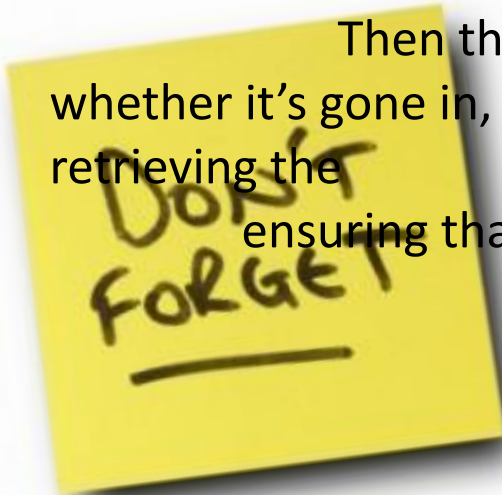
How does your memory work?

Stage 3: Long Term Memory

So to move things into our long term memory, we have to make the original information meaningful.

That's why your teachers teach lessons. To help you understand what you're trying to learn.

Then they often check whether it's gone in, because rehearsing it and retrieving the information is a good way of ensuring that you don't forget.



How does your memory work?

Stage 4: Putting it all together

You need to practise the same material over and over. A topic may need to be reviewed and revised up to 6 times, in different ways, so that it transfers into your long-term memory.



Watch the short video on strategies will help you remember, and revise, more effectively.

Memory Challenge

You will see 15 everyday items.

Your job is to remember as many of them as possible.

You will have 90 seconds to write them down once you have seen all 15 items.

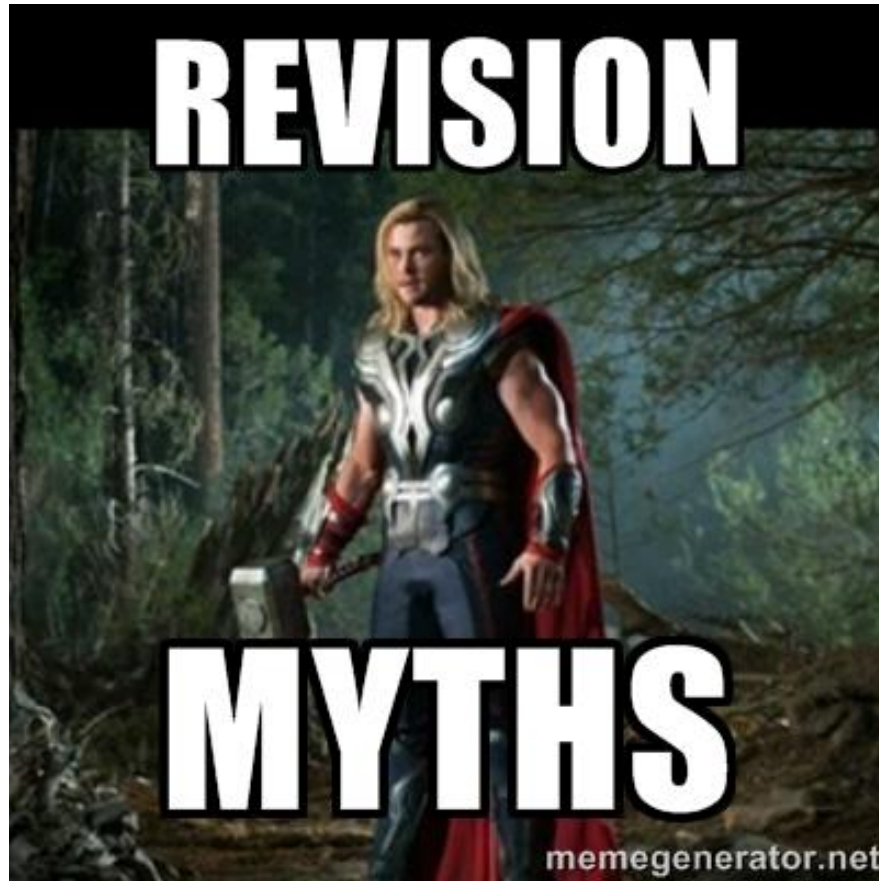
Task:

Discuss some of the memory techniques you used to try to remember the 15 items.

Memory Challenge



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Revise!

- Say: **'I will revise last minute'**. Last minute cramming does work – ONLY if you have revised hard beforehand so that you can quickly retrieve the knowledge from your brain.
- Say: **'I can't revise'**. You can. It might be tricky and boring and hard – but everyone can do it, given the right strategies and with effort.
- Say: **'My brother/sister/friend didn't revise and they got great grades.'** Nobody gets excellent results in examinations without effort. They may not be as visible, or they may have worked incredibly hard in lessons back when it was first learnt, but those who do best revise.
- Say: **'My friends aren't revising – they told me.'** Nobody goes around shouting about how hard they're working. We want it to look natural and we want to look like it is easy, but it almost always isn't. Don't believe them and get caught out!
- Say: **'I don't know how to revise'**. You will be given lots of effective strategies today. Practise them – they work.



Revision Strategies

Task:

Look at the 10 different revision strategies and explanations.

First:

Order the cards based on which strategies your table **WOULD** use most frequently.

Next:

Order the cards based on which strategies you and your partner believe to be most effective

Revision Strategies

Task: Rank these in order from 1 (Best) – 10 (Worst)

Practice Testing	Varying study topics
Re-reading the information	Using keywords / images
Summarising the information	Long term revising
Highlighting information	Self explanation
Asking “why”	Using mental images

Revision Strategies

Technique	Description	Utility
Practice testing	Self-testing or taking practice tests revision material	1 - High
Long term Revising (Distributed practice)	Implementing a schedule of practice that spreads out study activities over time	1 - High
Asking 'why?' (Elaboration)	Generating an explanation for why a fact or concept is true	2 - Moderate
Self-explanation	Explaining how new information is related to known information, or explaining steps taken during problem solving	2 - Moderate
Varying study topics (Interleaved Practice)	Mixing different kinds of problems, or different kinds of material, within a single study session	2 - Moderate
Summarization	Writing summaries (of various lengths) of revision texts	3 - Low
Mental Images	Attempting to form mental images of revision materials while reading or listening	3 - Low
The keyword mnemonic	Using keywords and mental imagery to associate key words and concepts	3 - Low
Rereading	Restudying text material again after an initial reading	4- Ineffective
Highlighting/underlining	Marking potentially important portions of revision materials while reading	4 - Ineffective

Effective revision **must** involve:



Application

Understanding

Memory / Knowledge

Don't... just re-read your book/textbook



Don't...just highlight everything!



Do...test yourself

LOOK
SAY
COVER
WRITE
CHECK

Past Exams

$P(12) = \frac{1}{36}$
 $P(13) = 0$

1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8
4	5	6	7	8	9
5	6	7	8	9	10
6	7	8	9	10	11
7	8	9	10	11	12

sample space

$y = mx + c$
 $m = \frac{y_2 - y_1}{x_2 - x_1}$

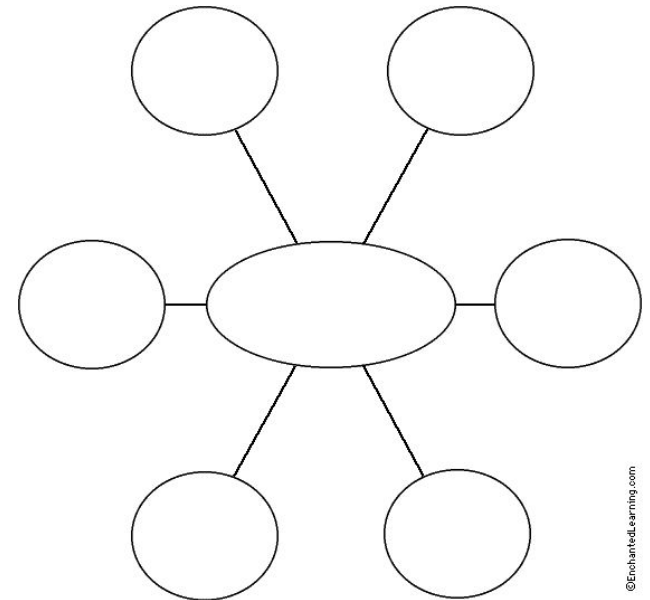
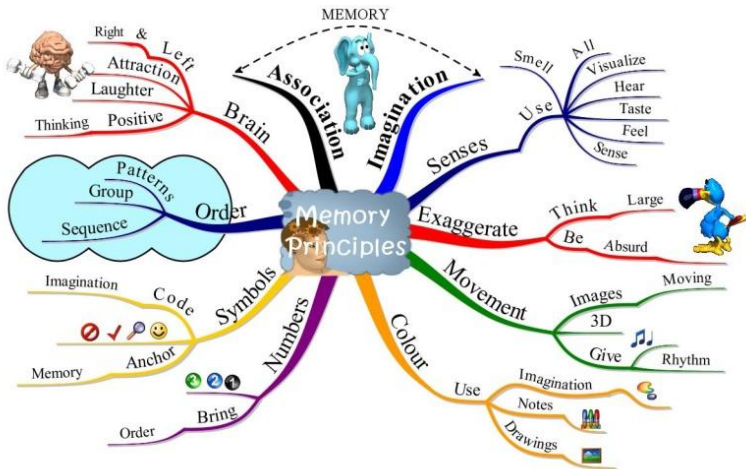
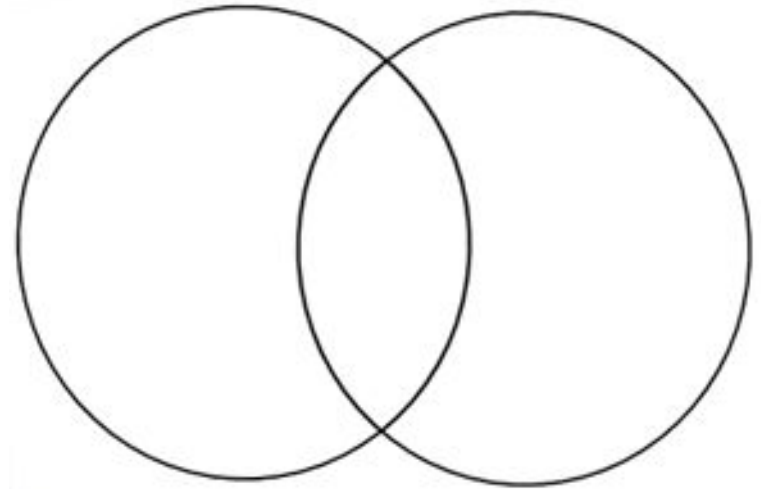
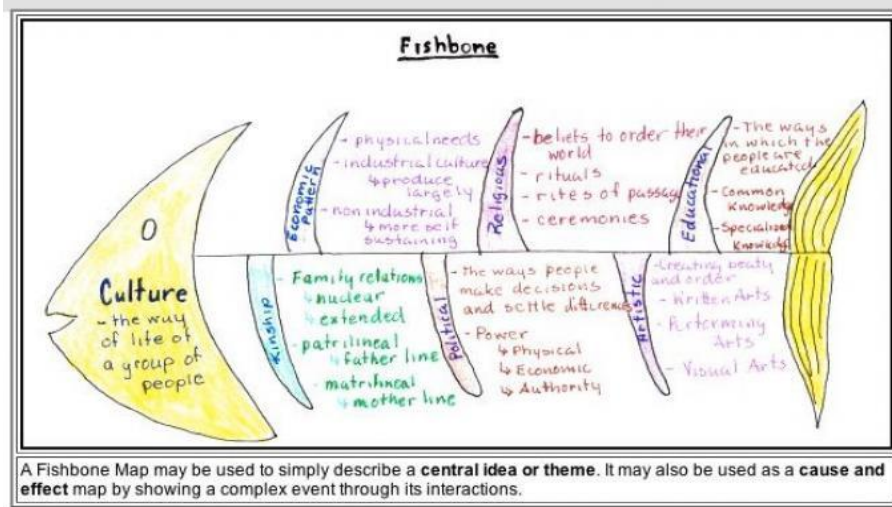
$y = ax^2 + bx + c$
 $y = a(x-b)^2 + c$
 $y = a(x-b)(x-c)$



Do...use flashcards



Do...use graphic organisers



Memory techniques



Get active.....Get creative

Don't just read the text over and over. That'll never work. Let your brain play with the material, in as many ways as you can. Make notes, figure out the key points and how they link together. Drawing a spider diagram or mind map can help to clarify how everything connects. Boil those endless paragraphs into nuggets of information. This will help you to understand the subject in a deeper way than by just reading it.

Memory techniques



I CAN
EXPLAIN
IT TO YOU BUT I CAN'T
UNDERSTAND
IT FOR YOU!

Explain it to someone else...

- If you can explain a concept to someone else and field any follow-up questions they have, then you'll know you've understood it. This also prompts your brain to work with the material in a new way, which will help to lodge it in your long-term memory. And if your friend asks you a question you can't answer, how great to find that out *before* the exam...

Memory techniques

**TEST
YOURSELF**

Test Yourself

- Create ways of testing your knowledge as you go along. This forces your brain to practise retrieving the information from its memory banks. If you're sitting exams, get your hands on as many past papers as possible, so that you can put your new knowledge to the crucial test – do you know enough to convince an examiner?

Memory techniques



Rehearse it

- Your brain has a massive memory bank, but unlike a computer, it needs you to go over new information several times for it to really sink in. Creating a new memory involves a new pathway being laid down between brain cells, but this pathway will disappear unless it's strengthened by being thought back over many times. Look back over what you've learned at the end of every study session to consolidate the memory. And have another quick look the next day, week, and month. Otherwise all your hard study will slip through your neurons like water through a sieve...

Memory techniques



Sleep on it

- This is the easy one. Learn the stuff, then go to bed. Or even just take a nap. Either way, your brain will rehearse the information but without any effort from your conscious self... Studies show that recall really does improve after you sleep and similarly, marks go down if you don't get enough sleep.

Do...get active

Double underline key points from a topic in your prep book

THEN

Create a mind-map of key points

THEN

Create flashcards using your mind-map

THEN

Test yourself

Discussion:

Which strategies best help you to revise GCSE PE?

**Task: Create a
revision graphic
organiser sheet for
your sports
psychology work.**