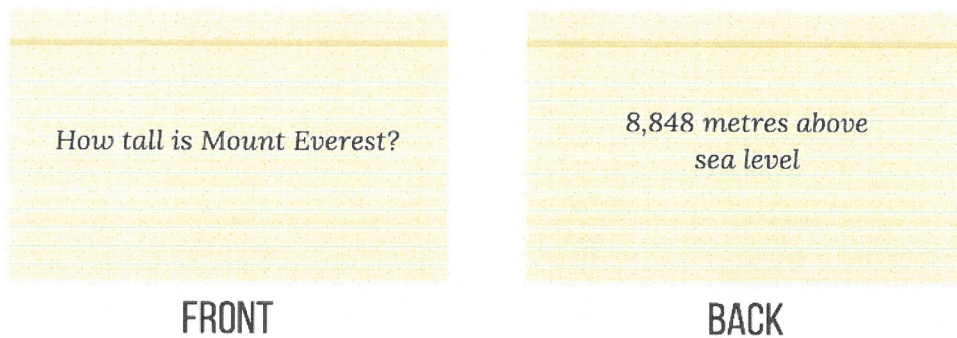


# What are flashcards?

Flashcards are sets of small, double-sided cards used to learn and revise details, keywords and vocabulary. They are useful for learning the relationship between two pieces of information. You write a question or key term on the front and then the answer or definition on the back.



## 1. Flashcards are for testing not summarising

Flashcards should be used to test your knowledge, not just as a way to condense your notes further. Use your flashcards as a quick way of testing what you know.

1. On the front of the card, write a key term or question.
2. On the back of the card, answer that question or write the definition for the term.
3. Try to guess the answer/definition on the front before checking the answer on the back.

There is some value in summarising your notes. Creating notes in your own words requires you to process the information and create connections in your brain. Summarising these further requires you to draw out the key points and choose between pieces of information.

**Once you have notes written in your own words and summarised – move onto testing yourself quickly.**

## 2. One idea, one flashcard

The most effective flashcards include one question followed by one answer (or one term followed by one definition).

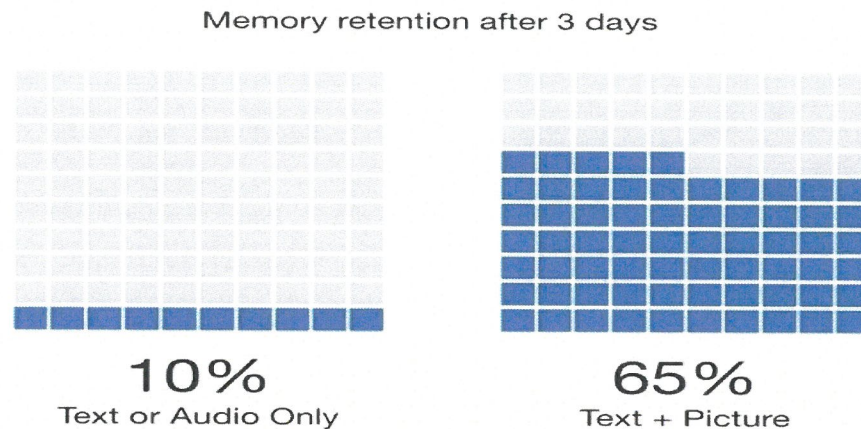
Don't force your brain to remember a complex and wordy answer. It's easier for your brain to process simpler information so split up your longer questions into smaller, simpler ones.

You will end up with more flashcards this way, but your learning will be a lot more effective.

You may only remember part of a wordy answer so you could trick yourself into thinking you understand it all. Or you could waste time repeating a long question over and over to try and remember all parts perfectly. Splitting the information allows you to learn each part separately at your own pace which should save time and improve your memory retention.

### 3. Boost your memory by combining pictures and words

The Pictorial Superiority Effect (PSE) explains that our brains find it easier to recognise and recall visual inputs – pictures are easier to remember than words. John Medina, memory expert (and developmental biologist), explains that text is pretty inefficient as words are actually viewed by our brains as lots of tiny little images that it has to process to find meaning. This takes time so pictures beat text – especially in the revision world. Medina discovered in his research that, after three days, someone is likely to remember around 10% of information they read. If an image is added to text this figure increases and 65% of information is remembered.



For you to gain the memory benefits of PSE, add pictures and diagrams to your flashcards.

**You may not think you can come up with pictures for a lot of your revision material – but here's some ideas. These pictures should not be works of art – quick and simple sketches are great.**

- ✓ Authors and people – draw a simple portrait or stick figure
- ✓ Places – a quick map
- ✓ Figures and data – a chart or graph
- ✓ Dates and sequences of events – a timeline
- ✓ Process or system – a flowchart.

### 4. Use spaced repetition to memorise your flashcards

**Great revision strategies share the same principle: testing your learning multiple times.**

Flashcards are simple to create and quick and convenient for testing yourself. You can only realise the power of flashcards if you give yourself enough time to review them multiple times. But testing yourself with each flashcard ten times could be a waste of your precious revision time. There will be some concepts you struggle to learn and remember, but others you might become confident with quickly. This is where spaced repetition comes in: a technique to help you revise what you need to, when you need to.

Spaced repetition is the technique of testing yourself multiple times, at intervals dependent on how well you know the concept. The concepts you should retest most often are those you're struggling to learn and

commit to memory. The time between these retests should be low. Therefore, the concepts you feel confident you understand and remember should be retested less frequently. Once confident, you should retest these flashcards just enough to not forget them. A simple way of implementing this tip is to sort your flashcards as you revise with them.

**After you answer a flashcard, put it into one of three piles:**

1. I have no clue about this.
2. I'm not too sure about this.
3. I really know this.

The '*no clue*' pile should be tested soonest. As you retest your knowledge, your flashcards should change piles until (hopefully) all of them are in the '*I really know this*' pile.

## 5. Don't just use flashcards

Flashcards are a great revision tool. Flashcards allow you to learn the answers to simple questions and the relationship between two pieces of information. What they don't allow you to do is apply this information to situations, understand it in depth or in a wider context, you need to add other techniques too.









- Mind maps can illustrate all the key ideas and details of a concept or topic.
- Dual Coding can help provide visual representation to help recall knowledge
- Quizzes can test your knowledge of broader and deeper ideas.
- Practice exam questions allow you to apply your knowledge to a situation or example, engage in critical analysis, synthesise ideas to create new understandings...and practice for your exam!

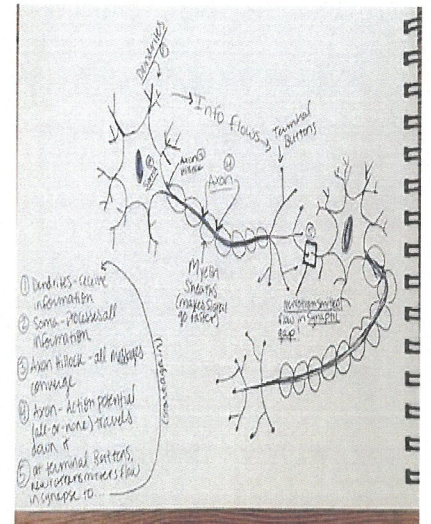
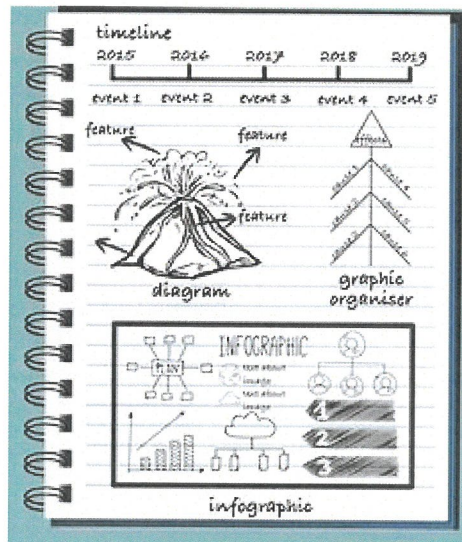
For super powerful and effective revision, recognise the value flashcards can bring to your exam preparation and use these alongside other active revision techniques.

## What is 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. This works because visual and verbal information are processed differently, which when both viewed simultaneously improves learning – hence the term “dual coding”.

This helps form a stronger connection and gives the information a better chance of cementing into our long-term memory, as well as helping us to recall this information more easily when needed.

	"But these girls aren't cheap labour - they're people".
	"As if we were all mixed up like bees in a hive"
	"The Titanic...unsinkable, absolutely unsinkable"
	"Hard-headed practical man of business"
	"Is it the one you wanted me to have?"
	"He creates at once an impression of massiveness, solidity and purposefulness"
	"alone, friendless, almost penniless, desperate"
	"Public men, Mr Bunting, have responsibilities as well as privileges"



## 5 ways to use Dual Coding for studying

### 1. Drawings

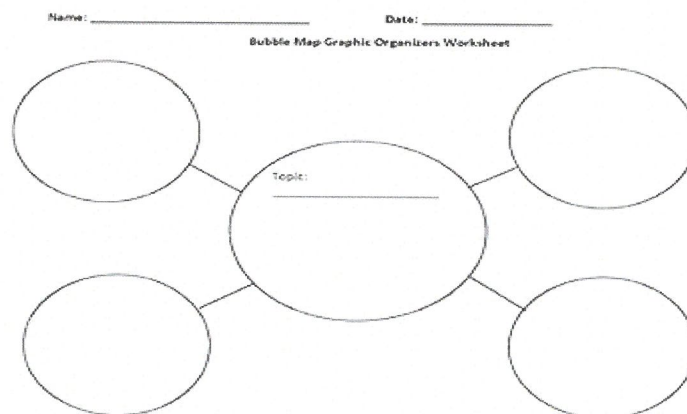
This does what it says on the tin: we're talking about simply drawing pictures. Research suggests that creating a drawing from a piece of information requires you to elaborate on its meaning. You have to really consider the information to decipher how best to represent it, create the necessary motor movements with a pencil, and use pictorial processing to inspect your drawing once it's finished. This deeper processing helps to cement the information into long-term memory.

Many students will be quick to dismiss this strategy because they “can't draw”. The fact is, there's no need to be an artist – the most important thing is that your drawings have meaning. As long as they represent the information you need to remember, even if this is only meaningful to you, drawings are a great way to boost student learning.

## 2. Graphic organisers

A graphic organiser is a way to organise information (both words and pictures) according to the relationships between different concepts.

There are loads of different types of graphic organisers, all corresponding to different ways of thinking: mind maps and tree diagrams organise information by “chunking” it into related groups; Venn diagrams organise information through comparing its similarities and differences; flowcharts organise information as it occurs within a sequence; other graphic organisers show information with cause-and-effect relationships.



## 3. Diagrams

Creating diagrams can help students visualise relationships and processes between different concepts, facilitating a deeper understanding.

## 4. Posters

Creating posters with key information, images and icons not only provides an overview of a specific topic but can also be a fun and creative way for students to revise material.

## 5. Timelines

Creating timelines with both images and text can help students better understand sequences and how different events relate to each other. This is particularly useful for subjects that involve chronological information.

**When creating your flashcards for your subject revision, add dual coding to help your memory recall and embed this knowledge into your long-term memory.**