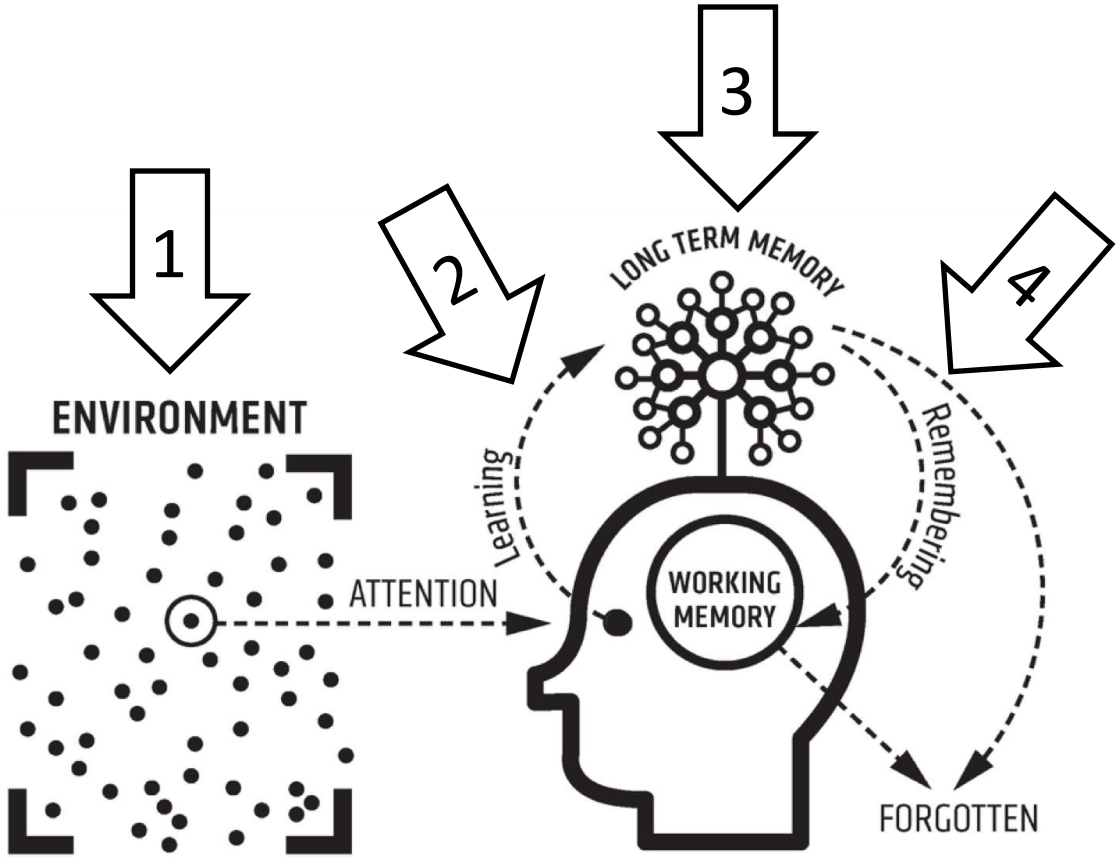
Revision Tutorial

How to Revise

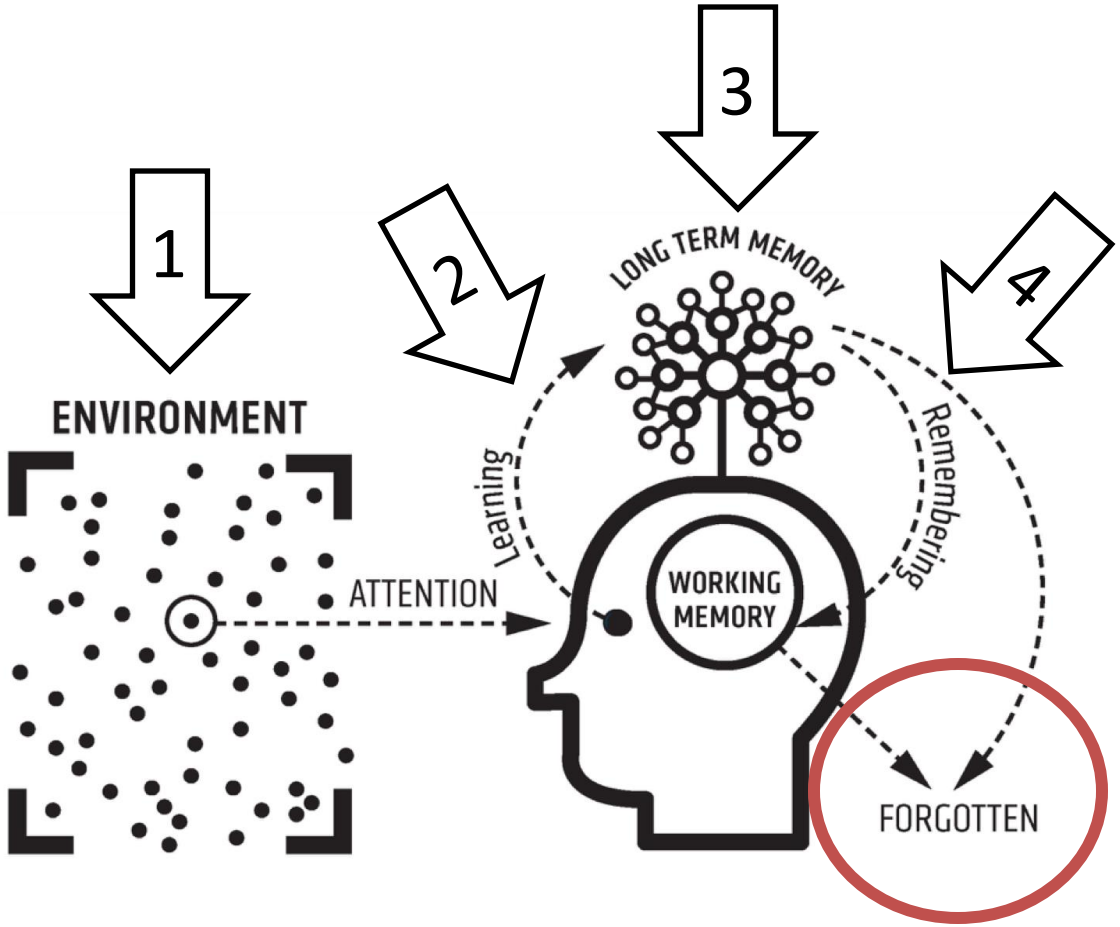
HECKMONDWIKE
GRAMMAR SCHOOL

How do we learn? A simple view...



1. We **pay attention** to our environment
2. Our working memory processes **small amounts of information** at a time
3. Information is encoded into long term memory by **connecting** it to things we already know
4. **Regularly remembering** learned information helps to prevent long term memory decay

How do we learn?

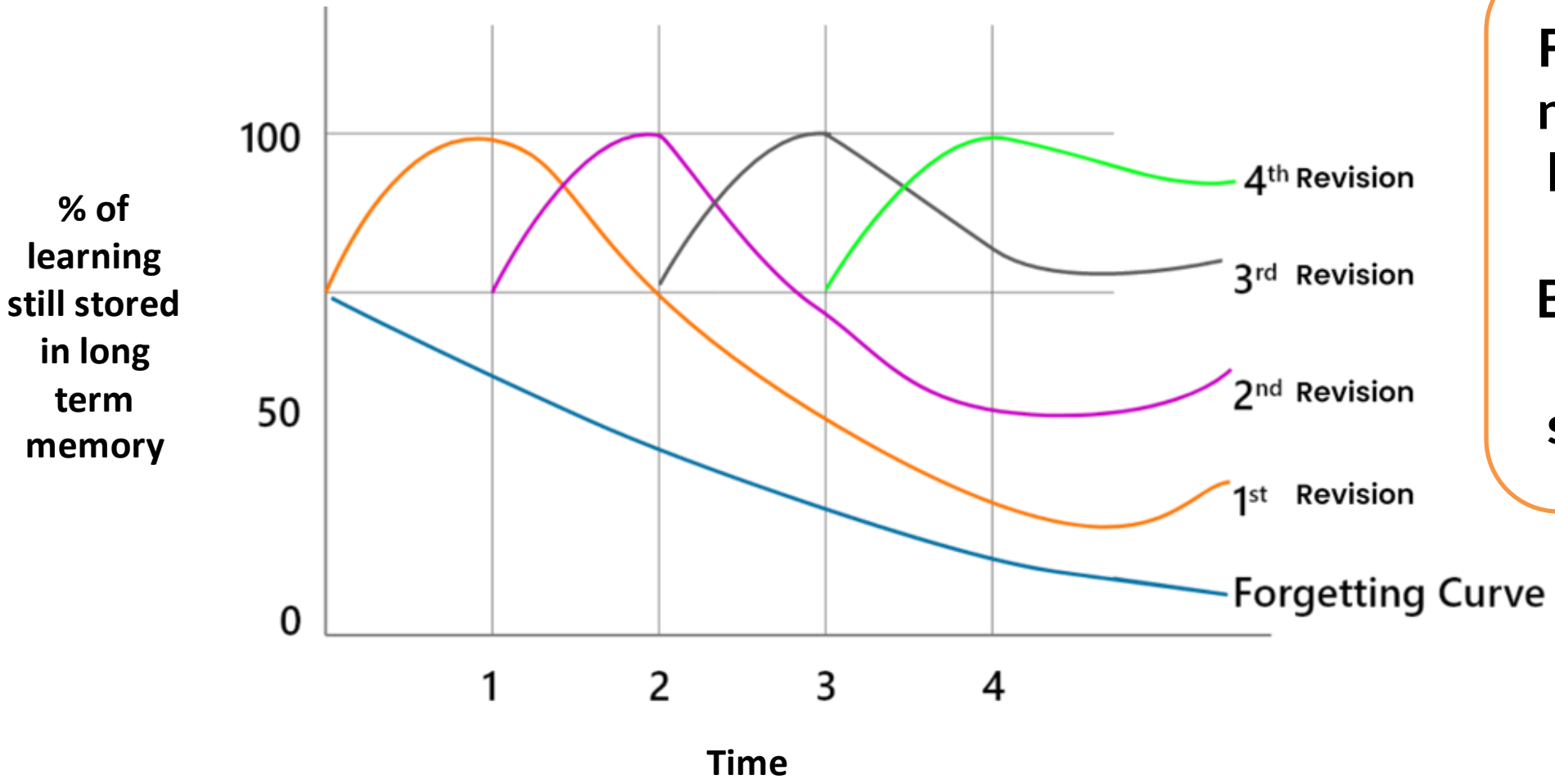


Forgetting can happen at any stage of the learning process:

- If our working memory is distracted
- If our working memory is overloaded and we try to do too much at once
- If we do not regularly remember what we have learned

So, how do we avoid forgetting?

We revise!



Forgetting is a natural part of being human.

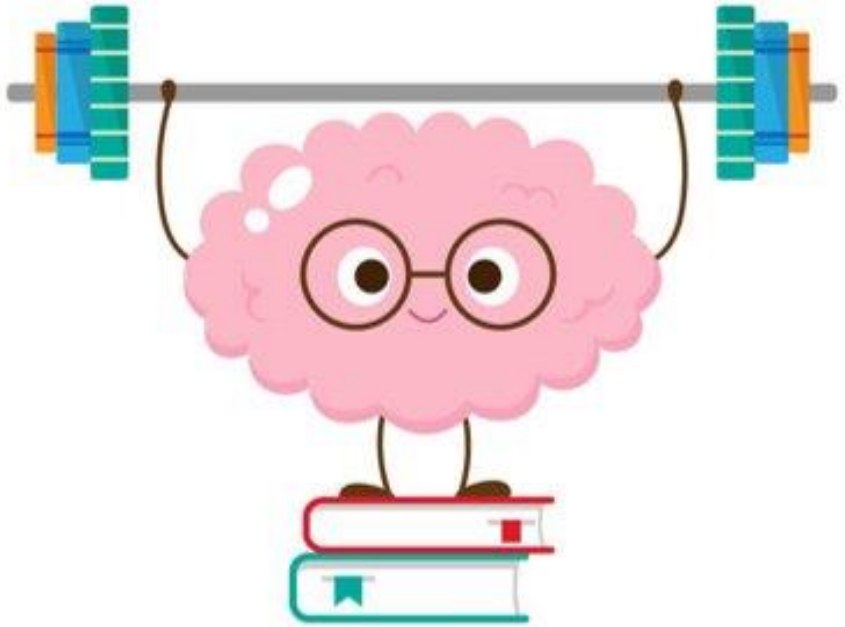
But! There are ways we can slow it down.

Train your brain!

Your brain is like a muscle, the more you train it the stronger it gets.

Retrieval practice boosts learning by pulling information out of your long-term memory, rather than trying to cram information in.

After pulling out what you know, you can focus on the things that were forgotten.



How do you revise?

Think – 1 minute

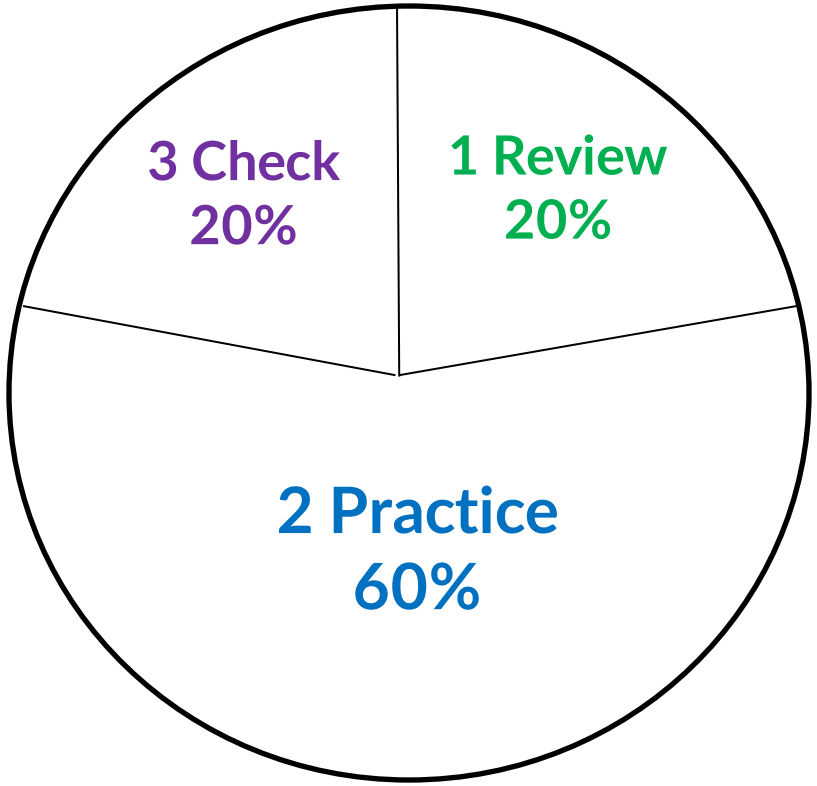
Think about and jot down ways in which you currently revise e.g. for a Stepping stone or Milestone.

Pair – 1 minute

With the person sitting next to you, share how you revise. Take 30 seconds each.

What does a good revision session look like?

You need to see each revision session in 3 parts:



1. Review – plan the topic you are going to revise. Prioritise the content you find most challenging.

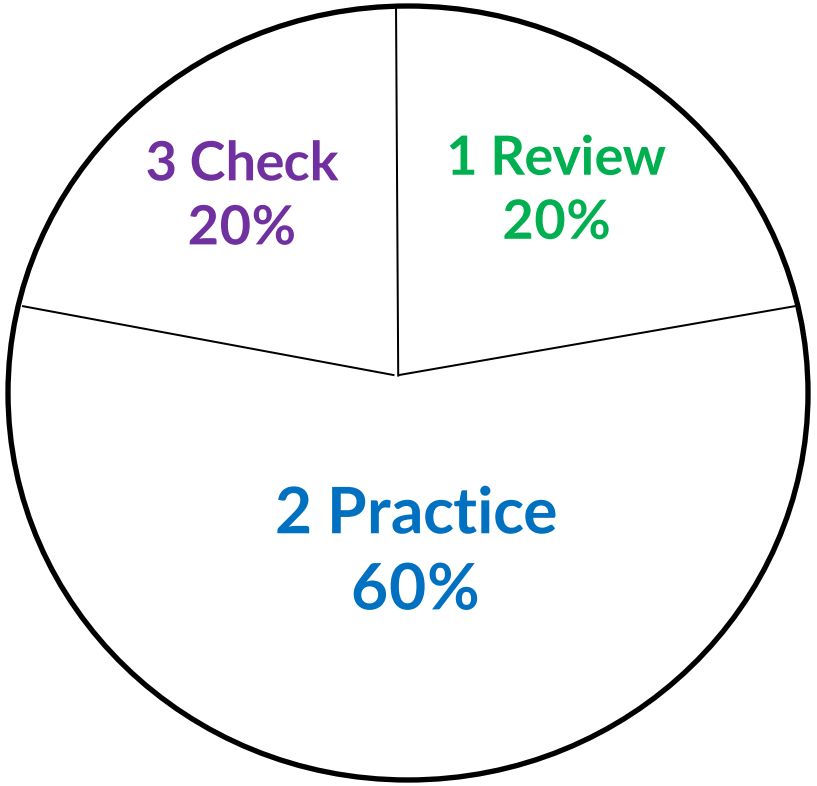
2. Practice – engage in a revision activity that tests your knowledge and/or that gives you opportunities to apply your knowledge to practice questions.

3. Check – compare your work to the right answers. You may need a teacher to support you.

Geography Example

3 Check

Ask someone to test you on your flashcards to check you have remembered the key information.



1 Review

Use a topic checklist on Weather and Climate to highlight content you find most challenging. Choose an area to focus on e.g. anticyclones.

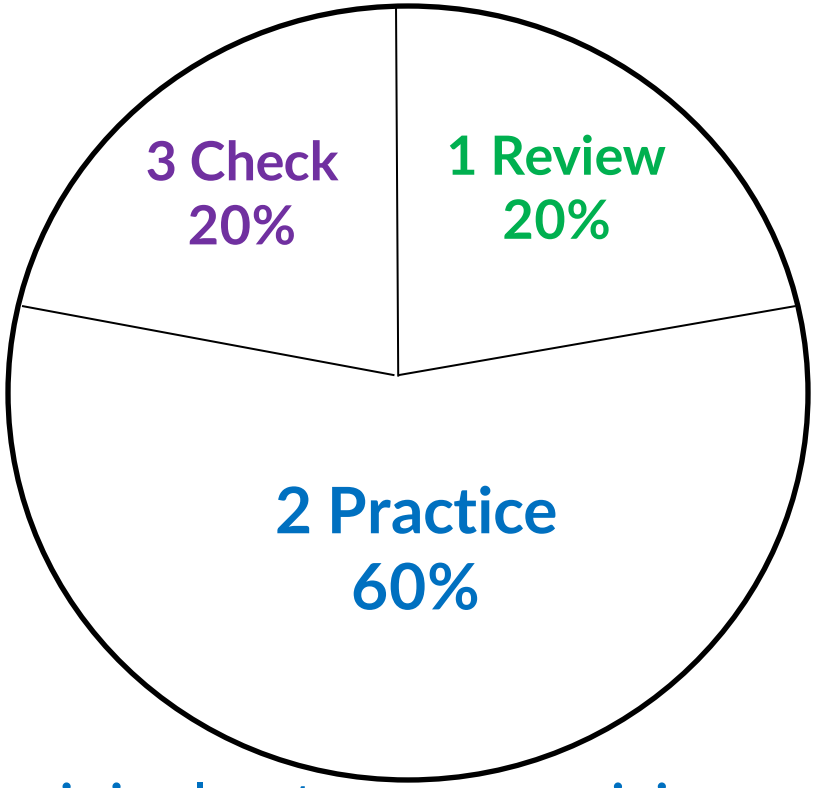
2 Practice

Spend time creating some flashcards on the area of content you are focusing on, using accurate notes to support you e.g. a revision guide. Avoid creating too many flashcards and keep them brief.

Science Example

3 Check

Use the past paper mark scheme to check whether your exam question has been answered correctly.



1 Review

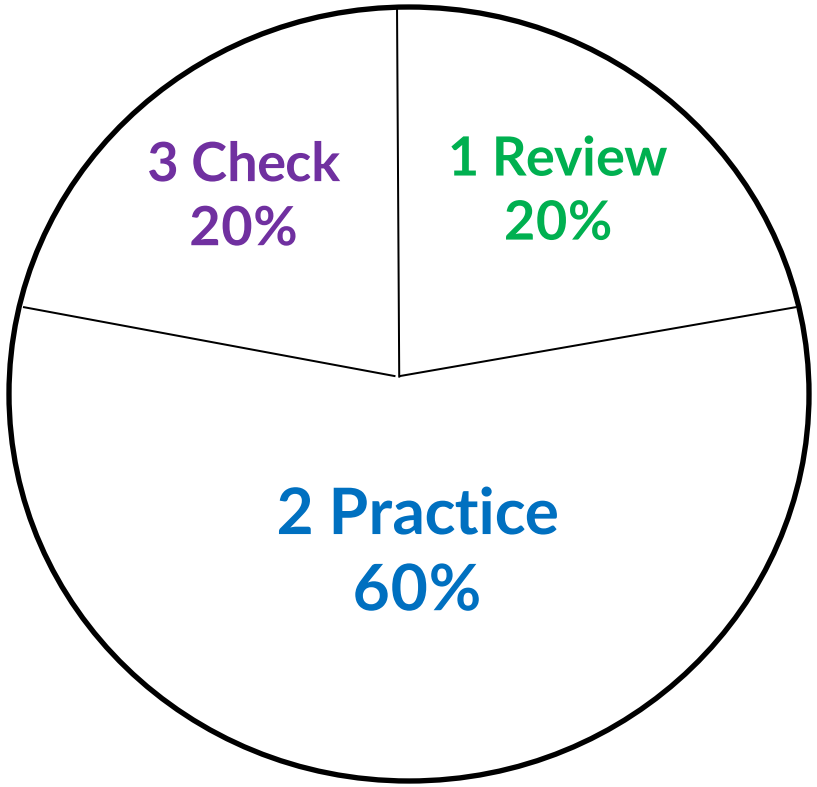
Write down everything you can remember about particle theory. Don't use anything to help you at this stage. This is a 'brain dump'.

2 Practice

Spend time looking back at original notes or a revision guide. Add to your 'brain dump' in a different colour anything you missed on particle theory. Practice applying your knowledge to a past paper exam question on this area of study.

What does a good revision session look like?

You need to see each revision session in 3 parts:



How might the review, practice, check cycle work for another subject?

In pairs, come up with an example for a subject other than Geography or Science. How could you ensure your revision session is high quality?

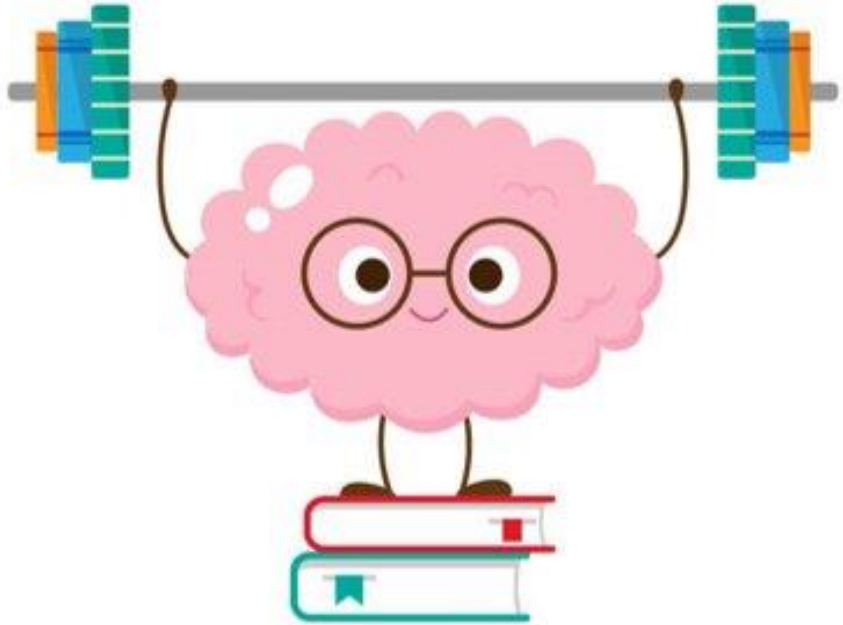
Revision Practice and Check

This is supported by over 100 years of research and evidence!

Once you have reviewed **what** you want to revise, **retrieval practice is the number one** way to do it:

1. Answer quiz questions from memory. Check your answers.
2. Answer multiple choice quiz questions from memory. Check your answers.
3. Write down everything you know about a topic. Check against your notes/revision guide or textbook.

Let's look at some examples!



Retrieval Practice Strategy 1 – E.g. Flashcards

1. **Answer quiz questions from memory. Check your answers.**

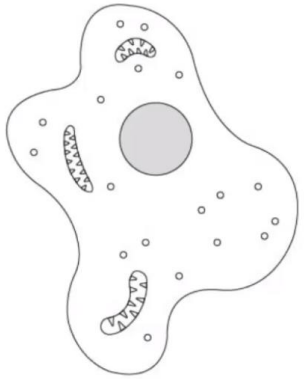
Flashcards are a great way to do this! They work well for:

- **Retrieving key terms**
- **Retrieving key facts/processes**
- **Retrieving examples/case studies**

Flashcards – Example 1

Example 1 – Front	**Example 1** – Back (Hidden)
Key Term	**Definition**

Flashcards – Example 2

Example 2 – Front	**Example 2** – Back (Hidden)
Describe the sub-cellular structure of an animal cell 	**Nucleus** – contains genetic information (DNA) and controls cell activities **Cytoplasm** – jelly like structure where chemical reactions take place **Cell membrane** – surrounds the cell and controls what enters/exits **Mitochondria** – where aerobic respiration occurs and energy is released **Ribosome** – where protein synthesis takes place

Flashcards – Example 3

Example 3 – Front	**Example 3** – Back (Hidden)
Why did the Romans want to invade Britain?	• To grow the Roman Empire • Wealth – taxes and silver • Improve lives – build towns and provide fresh water supplies • Farmland – grow and send food back to Rome • Strong army – they could bring law and order • Fame and fortune for those in charge • Supply more slaves for rich Romans

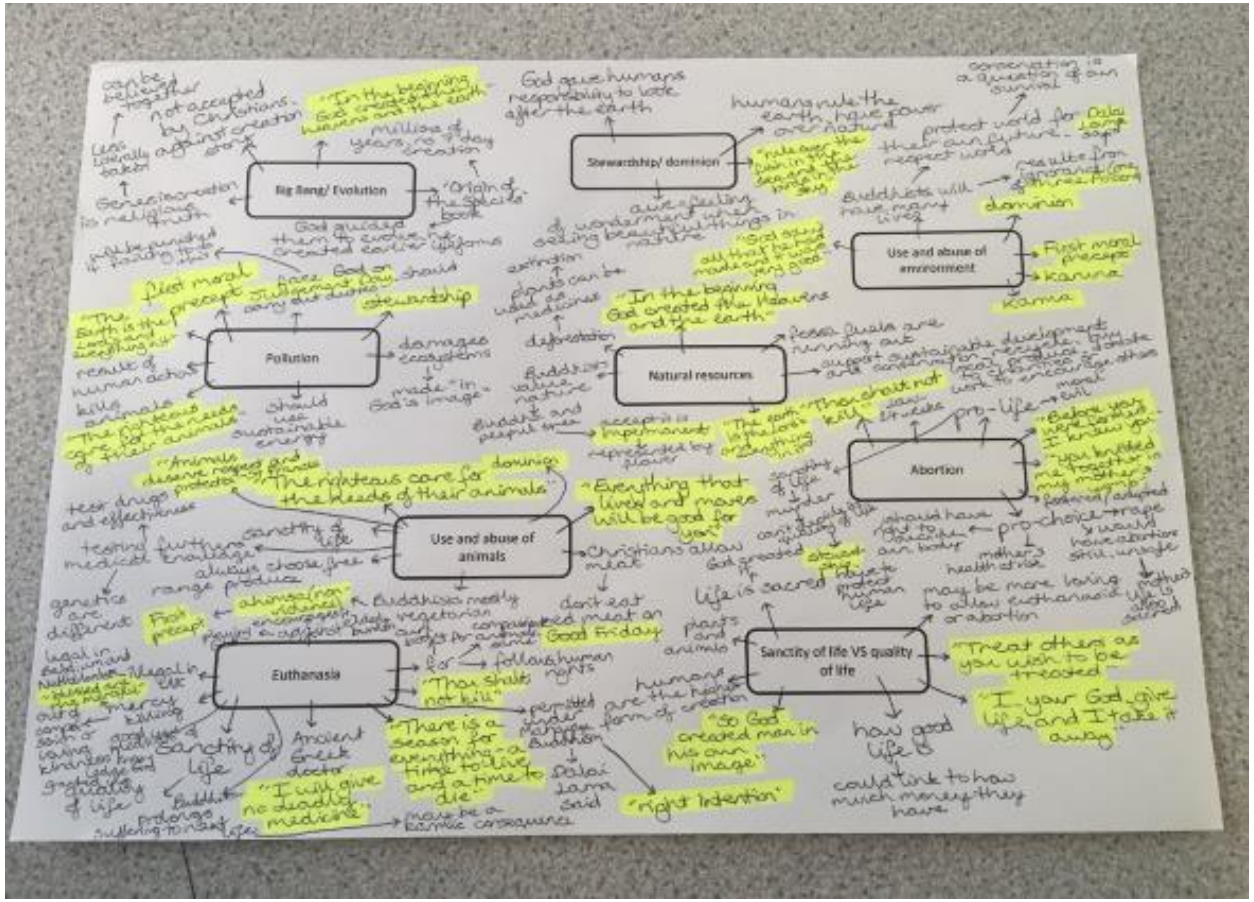
Retrieval Practice Strategy 3 – E.g. Brain dump

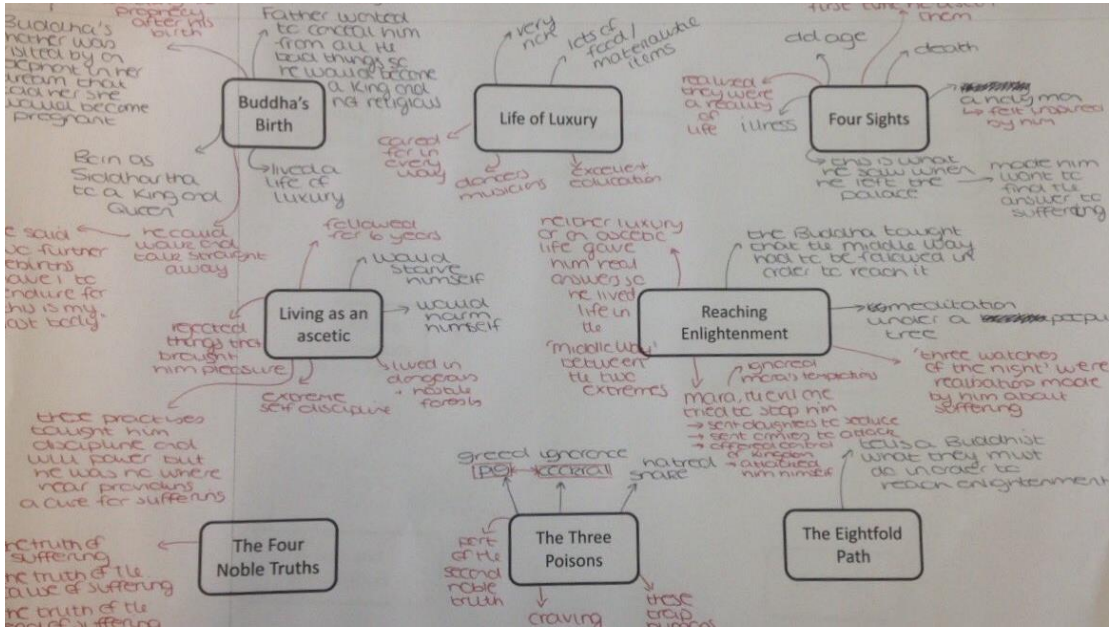
3. Write down everything you know about a topic. Check against your notes/revision guide or textbook.

'Brain dumps' are a great way to do this! They work well for:

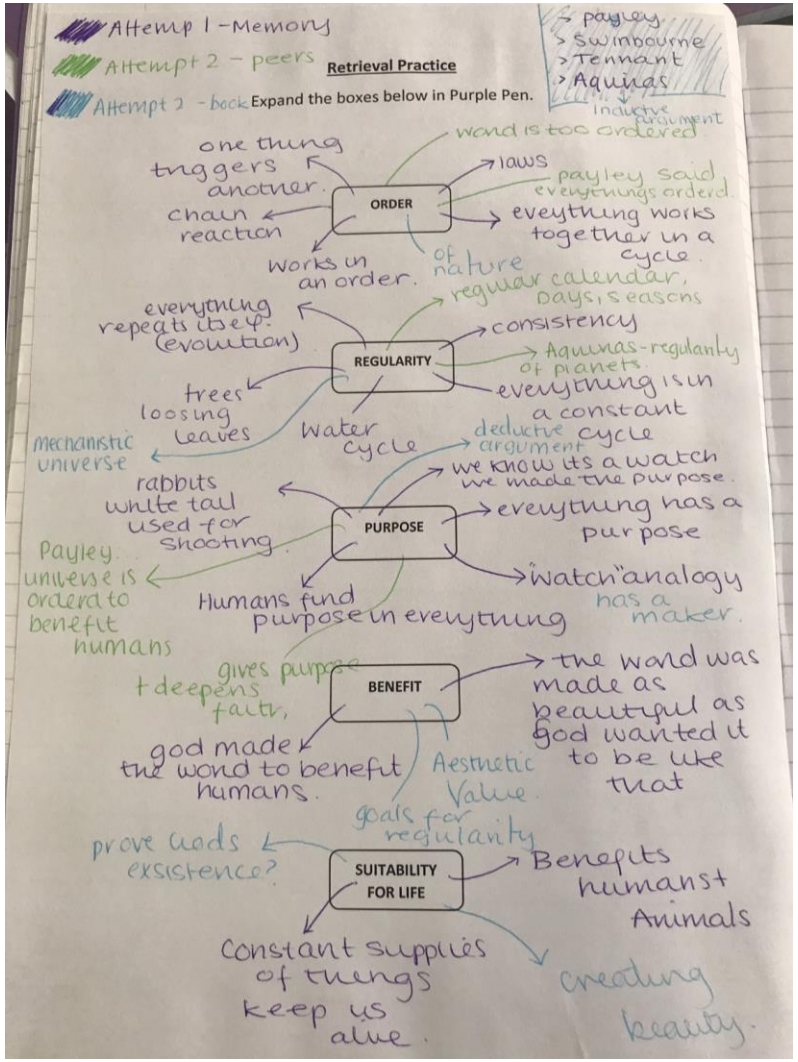
- **Reviewing what you know**
- **Helping you target what you have forgotten**
- **Applying to practice questions**

Brain Dump – Example 1

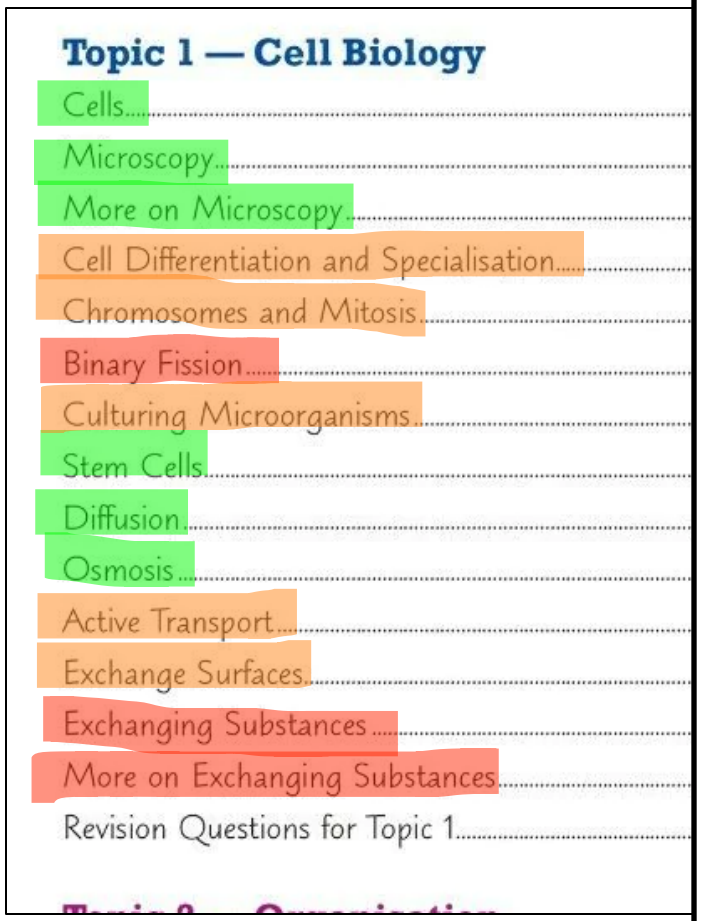




Brain Dump – Example 2



Brain Dump – Example 3



Topic 1 — Cell Biology

Cells
Microscopy
More on Microscopy
Cell Differentiation and Specialisation
Chromosomes and Mitosis
Binary Fission
Culturing Microorganisms
Stem Cells
Diffusion
Osmosis
Active Transport
Exchange Surfaces
Exchanging Substances
More on Exchanging Substances
Revision Questions for Topic 1

If unsure where to start with a brain dump, **review** a topic list (remember that 'review' is always the first step in a good revision session) such as this one and highlight where your areas of strength and development are. Here I have used green, amber and red to colour code.

I will focus on the red areas first where I need the most revision. I will start by brain dumping everything I remember on 'Binary Fission' then add anything I missed using the revision guide. This is a great way to combine **'practice'** and **'check'**.

I could then attempt a practice question or two on 'Binary Fission' to make sure I know how to apply the learning.

Planning your revision

2023 MAY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3 5-6pm Bio 7-8pm Chem	4 5-7pm parents Eve	5 5-6pm DT 7-8pm Physics	6 9am Footy 1-2pm RE 3-5pm Geog
7	8 5-6pm Maths 7-8pm English	9 6pm Swim 7-8pm Hist	10 5-6pm Bio 7-8pm Chem	11 6pm Swim 7-8pm RE	12 5-6pm DT 7-8pm Physics	13 9am Footy 1-2pm Hist
14	15 5-6pm Maths 7-8pm English	16 6pm Swim 7-8pm Geog	17 5-6pm Bio 7-8pm Chem	18 6pm Swim 7-8pm Hist	19 5-6pm DT 7-8pm Physics	20 9am Footy 1-2pm RE 3-5pm Geog
21	22 5-6pm Maths 7-8pm English	23 6pm Swim	24 5-6pm Bio 7-8pm Chem	25 5-6pm DT 7-8pm Physics	26 7pm Birthday Meal	27 9am Footy 1-2pm RE 3-4pm Hist 4-5pm Geog
28	29	30	31			

<<<<<<<<<<<<<Half Term Holidays>>>>>>>>>>>

- Efficient
- Organised
- Prioritised
- Alternate subjects to space practice

NIL SINE LABORE

How might you revise better now?

Think – 1 minute

Think about what you have learned today and how you might use this information to improve your revision going forward

Pair – 1 minute

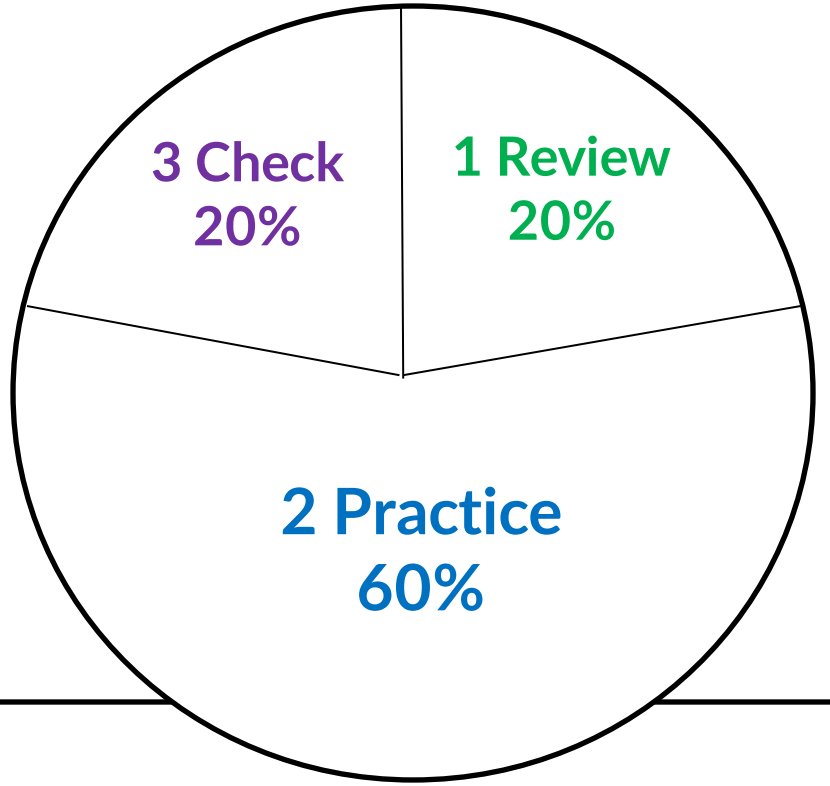
With the person sitting next to you, share one way in which you will improve your revision going forward. Take 30 seconds each.

Optional resources beyond this slide

Instead of printing this, students can jot down their ideas in their planner

My Example – _____

3 Check



1 Review

2 Practice

2023 MAY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

2023 JUNE

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	