How do I know what I know?

How well do you know your brain?:

We only use 10% of our brains.

I've got a bad memory, I'll never get better at Science.

We can always trust our memory.

Re-reading notes and highlighting are effective revision strategies.

We do not need to remember facts now we have the internet.

How well do you know your brain?:
True or False?

We only use 10% of our brains. **False**

I've got a 'bad' memory, I'll never get better at Science. **False**

We can always trust our memory. **False**

Re-reading notes and highlighting are effective revision stra **False**

We do not need to remember facts now we have the intern **False**

Meta-cognition: the ways that learners check and influence their learning to be effective, improving long term memory and performance
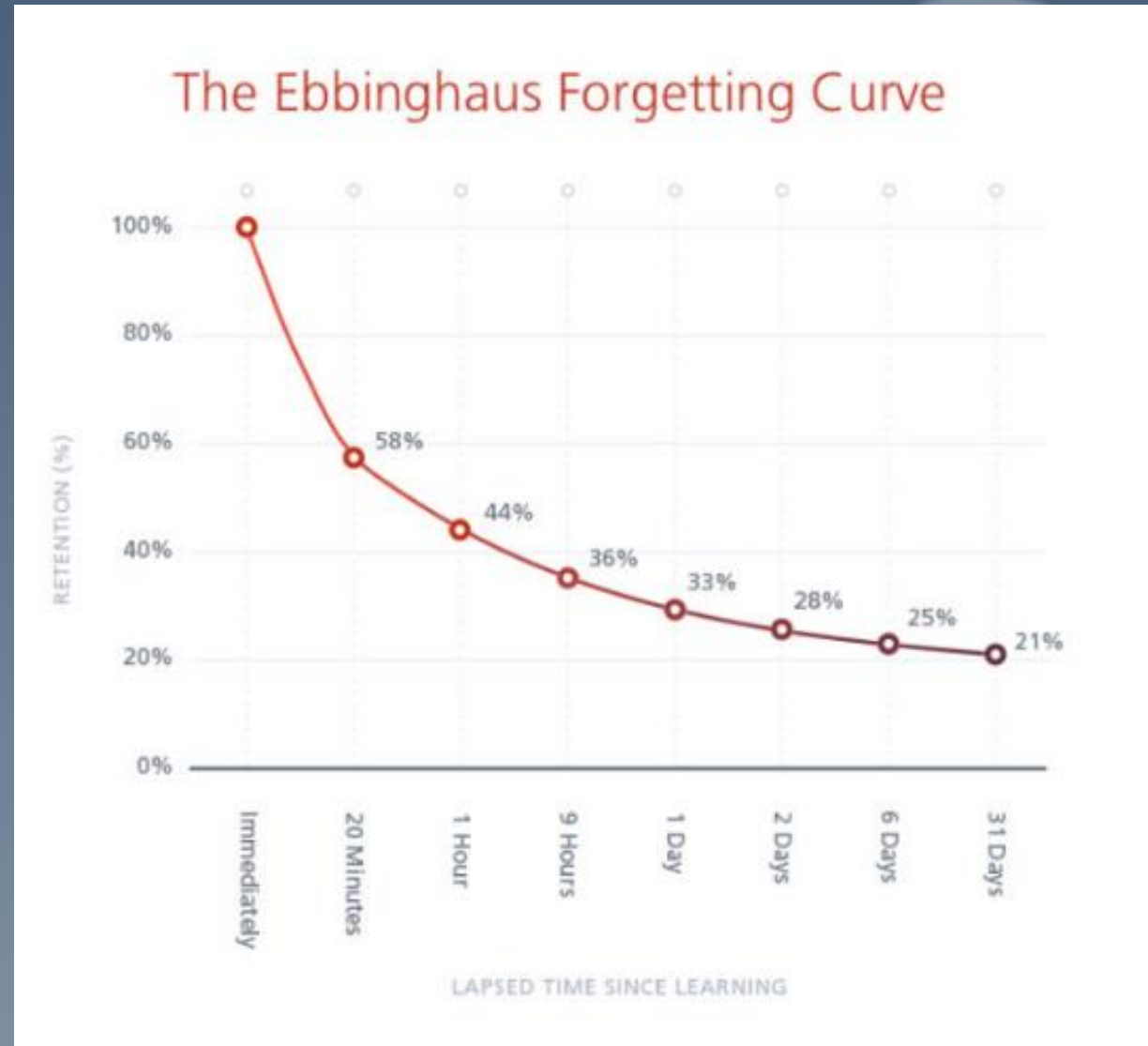
Self-regulation: being aware of your strengths and limitations, using strategies to make good decisions, have positive experiences and learn
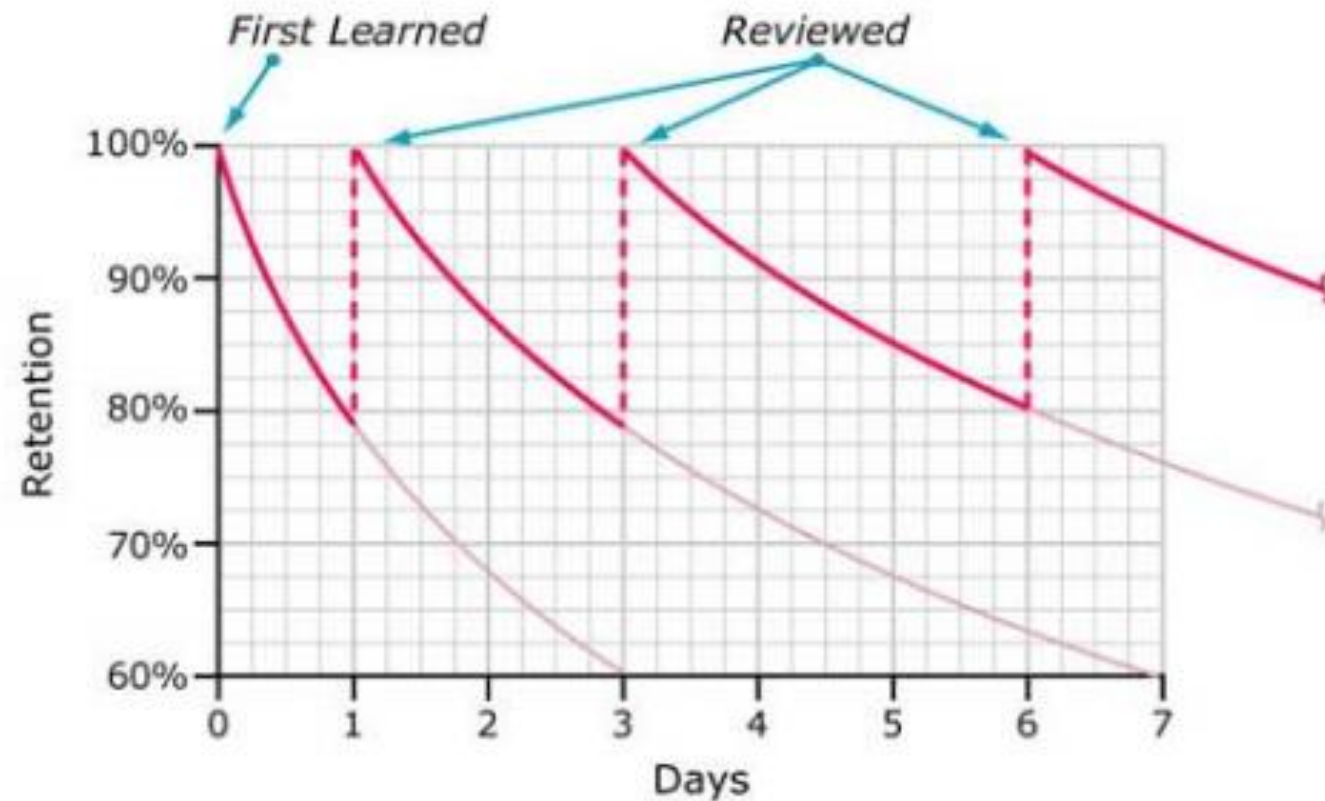
Cognitive over-load

Why do we forget?

Why do we forget?

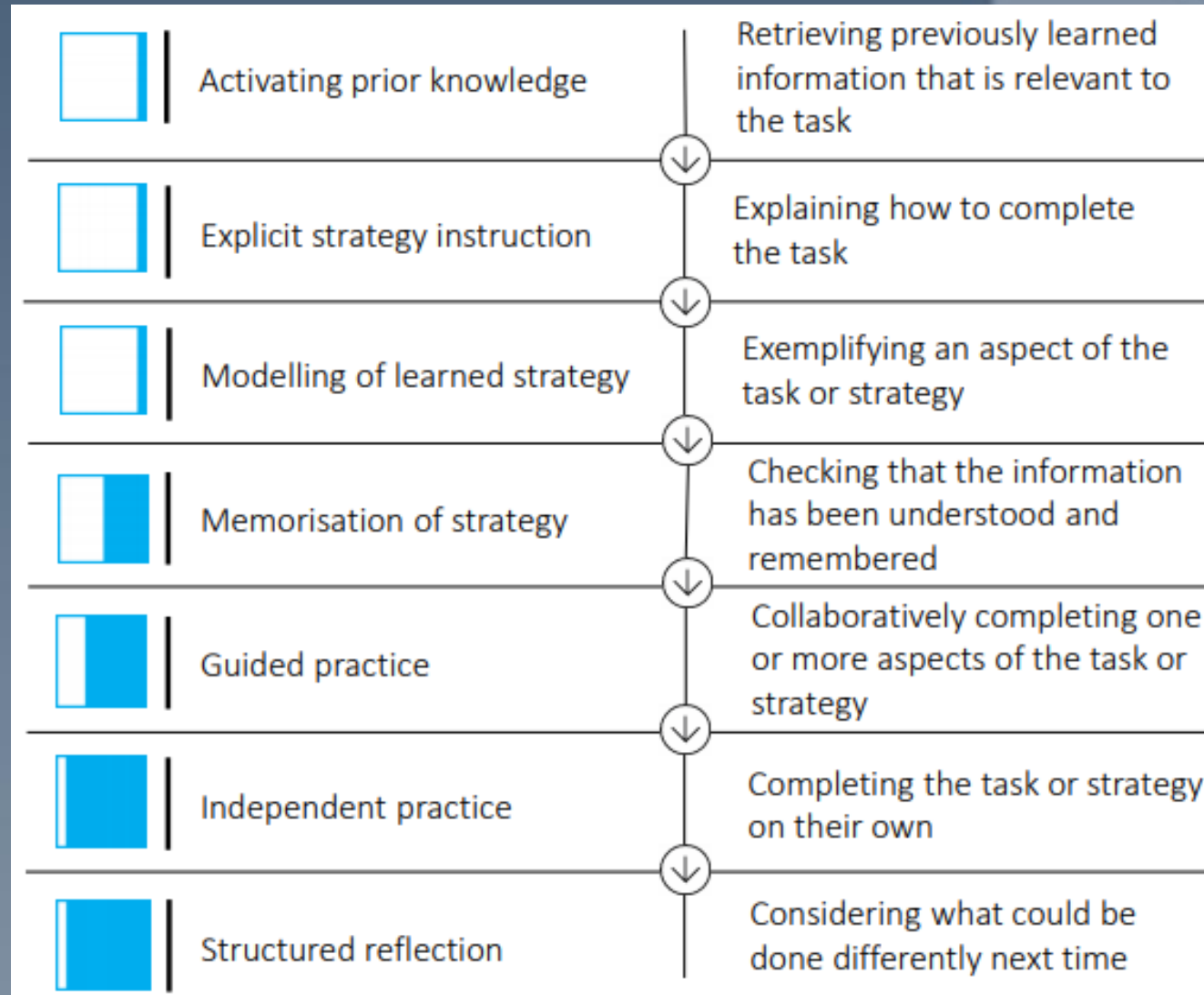Typical Forgetting Curve for Newly Learned Information

Self-regulation

https://www.youtube.com/watch?v=WRx3eOWC2l4

Less teacher, more student

	Activating prior knowledge	Retrieving previously learned information that is relevant to the task
	Explicit strategy instruction	Explaining how to complete the task
	Modelling of learned strategy	Exemplifying an aspect of the task or strategy
	Memorisation of strategy	Checking that the information has been understood and remembered
	Guided practice	Collaboratively completing one or more aspects of the task or strategy
	Independent practice	Completing the task or strategy on their own
	Structured reflection	Considering what could be done differently next time

What cognitive skills are you using here?

Donald Trump azt mondta, hogy a következő héten az Egyesült Királyságban meglátogathatja Brexit Party vezetőjét, Nigel Farage-ot és Boris Johnson konzervatív képviselőt.

Az amerikai elnök "baráti" és "jó fiúk" -nak nevezte őket.

Trump úr háromnapos látogatása magában foglalja a Buckingham-palota vacsoráját és reggelit Theresa May miniszterelnökkel.

Jeremy Corbyn munkaügyi vezető elmondta, hogy nem fog részt venni Trump úr állami bankettén, azzal vádolva, hogy az elnök "rasszista és misogynista retorikát" használ.

Donald Trump állami látogatása: Mindössze annyit kell tudni
Az elnök úr június 3-tól 5-ig ünnepélyes fogadtatást fog tartalmazni a Buckingham-palota kertjében és egy emléknapot Portsmouthban a D-Day leszállások 75. évfordulójára.

Trump úr dicsérte Farage úr "nagy győzelmét" az európai választásokon, amelyben a Brexit párt az Egyesült Királyság szavazásainak 32% -át kapta.

Effective learning techniques

Flashcards

Simply create with questions on side and answers on the other side. You can colour code for specific topics and quiz yourself or others.

Post its can be also useful for key words and equations

How to use

Using Flashcards

Using the Leitner Method, using the video below
https://youtu.be/C20EvKtdJwQ

You can also create excellent flashcards online or on your phone using Quizlet which also had an app.

There are a variety of ways to use flashcards in revision for the skills you need

Key words

Create for key words and terms

Equations

Create them for the equations you must learn
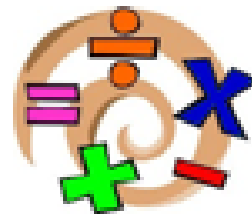
RPA's

Create them with the method on to learn the key RPA points

Effective learning techniques

Retrieval Practice

Testing what you know is a powerful tool in revision, the effort to remember something really strengthens your memory

Apps such as Memrise and Quizlet allow you to use or create your own quizzes based on topics.

Create them, test yourself or get someone to test you, it's works!

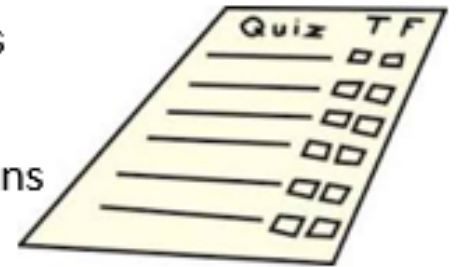### How to use

Spaced

Test on old and new topics mixed up

Knowledge Organisers

Use to create 'must know' quizzes for a topic

Types

There are a number of types you can create:

- Multiple Choice Questions
- True or False
- Short Explanation Questions
- Odd One Out
- If this is the answer then what is the question

Examples

'Give two examples of......'
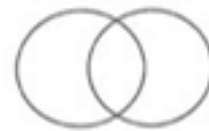
Effective learning techniques

Transform It

Graphic organisers are a great way of 'transforming' your notes/information into visual revision topics.

They can be used to create links, show a narrative, identify the causes/consequences and importance of something.
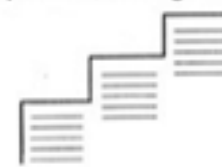
How to use

1. **Links between topics** – Create a mindmap/flow diagram to link the big ideas between topics. Eg: Energy and Electricity

2. **Comparisons** – Do a Venn diagram to compare models in electricity. You can also use it to compare renewable and non-renewable energy resources.

Venn Diagram

Sequential Thinking Model
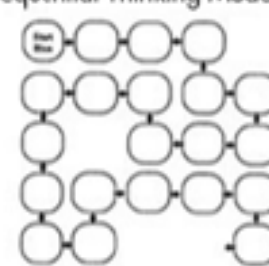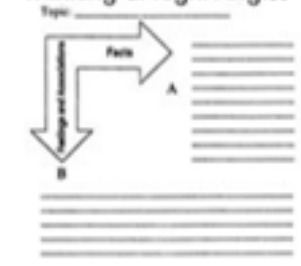
Sequential Thinking Model
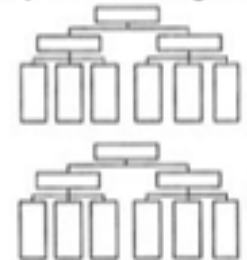
Chain   Chain

Sequential Thinking Model

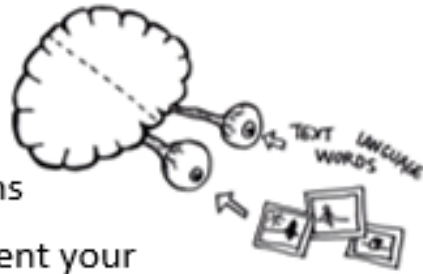Thinking at Right Angles

Spider Map

Web

Mind Map

Effective learning techniques

How to:

1. Use simple drawings with matching simple descriptions

2. The drawing should represent your understanding of the topic

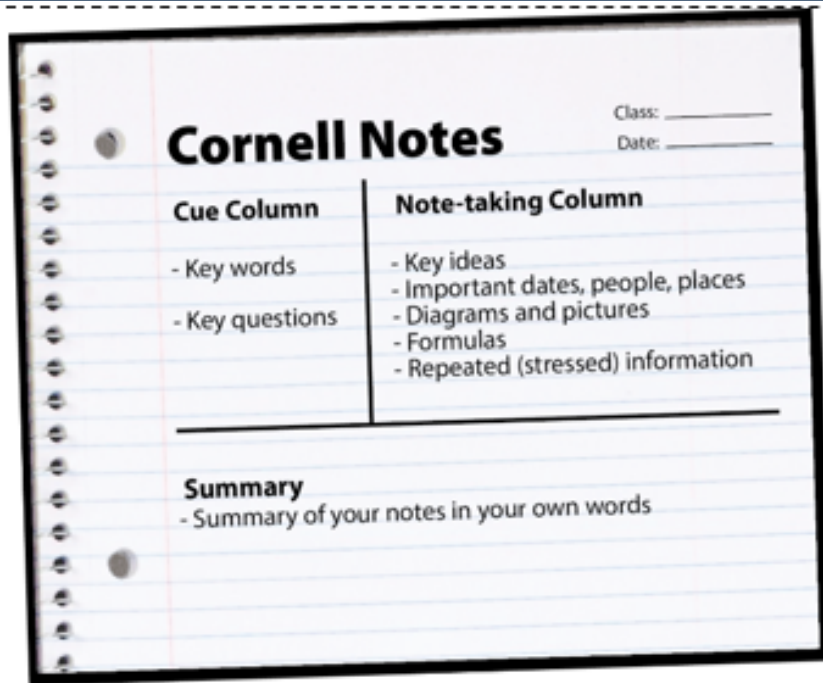3. Try to draw links between images

Dual Coding

Dual coding' is the method of putting your knowledge into visual form alongside words. It increases the chances of you remembering it.

An example activity you can do is creating a Sankey diagram to represent energy transfers.

Effective learning techniques

Effective learning techniques

Interleaving and Spacing

Don't revise your all topics in one go (cramming), you should revise 'chunks' of a topic for small amounts of time (15 minutes) and then move onto another 'chunk' from a different topic.
This will improve your memory!

e.g. 15 minutes on Cell Biology, then Electricity

Ways to use them

1. Create a revision plan to cover topics you need to cover (least confident first!) and then go back over them again later. Spread our your learning in small sections, 5 hours to 5 x 1 hour

2. Use your flashcards to self test yourself on old and new topics, self testing across these

Have you forgotten……?

- ✓ **What % of our brain function do Scientists know about?**
- ✓ **What is one strategy of self-regulation to resist temptation?**
- ✓ **What % of information do we remember if we do not revisit it after 31 days?**
- ✓ **What do you create alongside words in dual coding?**
- ✓ **What language was the article about Donald Trump written in?**

Summary: These are not just for revision

- ✓ **Becoming a lifelong effective and successful learner**
- ✓ **Making classwork and exams less difficult**
- ✓ **Improving long-term memory**
- ✓ **Improving confidence**
- ✓ **Developing more independence**
- ✓ **Having a wider range of strategies to rely on**
- ✓ **Making study more effective**
- ✓ **Using skills across difference subjects**
- ✓ **Improving your progress in all subjects and skills**