31. Practice Activity: Spaced Practice

Studies show that snacking regularly on learning beats bingeing. In other words, rather than cram immediately before an exam, you can save time and energy by starting earlier and spacing out smaller sessions of practice and revision. You use your memory more this way. And as Benedict Carey says in his book *How We Learn* (2015, p. 40), 'using memory changes memory'. The more often something is recalled, the stronger the memory gets; a cycle of 'learn, forget, relearn, remember again' is strengthening your memory. A whole bunch of studies show that this process of spaced practice works way better than cramming. It also involves working for shorter periods rather than sitting down for epic sessions the night before an exam. That's a win-win.

But how do you space out practice? Well, that depends on how long it is before your exam. Since we're putting this activity in the March section of the book, we're going to build a programme of spaced practice that assumes three months until your exam, but if you're using this at another time of year, don't worry!

A study by academic researchers at the University of California San Diego (Capeda et al., 2008) concluded the following about spacing:

Time to exam	Optimum study intervals
1 week	Every 1–2 days
1 month (4 weeks)	1 week
3 months (12 weeks)	2 weeks
6 months (25 weeks)	3 weeks
1 year (52 weeks)	1 month

Source: Carey (2015), p. 77.

So, for our purposes, you need to be reviewing topics every two weeks, allowing them to fade in the gaps, then refreshing them when the next test comes along.

You don't necessarily have to do this for all your exams. Start by choosing a subject that you think needs a boost and plan out some spaced practice using the grid below. We've given some examples to help get you started.

Week	1	2	3	4	5	6	7	8	9	10	11	12
Topic A	Revise		Deep review		Deep review		Deep review		Quick review		Quick review	
Topic B		Revise		Deep review		Deep review		Deep review		Quick review		Quick review
Topic C												
Topic D												
Topic E												
Topic F												

Note: Revise – an initial study of the topic, summarising it; deep review – an in-depth revision session, re-remembering everything; quick review – a shorter, light touch review, checking memory.

One more thing: look out for what researchers call the 'fluency illusion' – that is, the tendency for us to be able to recall facts very quickly immediately after study. It might make you think, 'I've got this nailed. I can do it!' That might not be the case. Let it fall into your subconscious during the gap, then try to recall it again.

A little more detail:

Deep Reviews

These often involve a detailed, slow trawl of the information; going through it bit by bit, remembering everything and checking understanding, sometimes chasing down missing information or correcting errors. Aim for a whole topic in one sitting. You're building good, strong foundations.

Quick reviews

These might involve something much speedier and lighter – you might be reading through, re-capping, or best of all teaching the information you've pulled together in the deep review.

Final Thoughts

Imagine memory as a muscle, lifting things from your subconscious to your conscious, like a weightlifter hauling up weights.

Lifting things back into your conscious takes muscles. But sometimes we try to remember things – to lift them into the light – without practising lifting. No wonder we find it exhausting! Often pupils who haven't practised lifting enough say, "I have a terrible memory," or "I can never remember anything." What they mean is "I haven't practised recalling things enough."

And here's the good news – you can make lifting easier!

Have a go at this simple (and not very serious!) experiment. Below are two lists of twenty words each.

LIST A is arranged alphabetically.

Study it for 60 seconds. Cover the words up and see how many you recall.

Then have a look at the words on **LIST B, arranged thematically**.

Study them for 60 seconds. Cover them up and see how many you can recall.

Now compare your two scores!

List A score: . . . .   List B score: . . . .

Most people have a better result with list B than list A* Why? Well, we've rigged the game a little. List B is the second list you've tried to memorise so you've had a little more practise. And list B is arranged thematically, so it gives you a better chance of recalling the words.

In conclusion then, regular recall from organised notes might well give you a better chance of success.

* If you scored higher on LIST A than B, you might consider skipping this activity and choosing another instead! We're all (slightly) different in the way we work and remember things....

LIST A:

Amber
Anger
Bench
Butter dish
Cheese
Croissant
Danger
Delicious
Dracula
Football
Haircut
Hammer
Hedgerow
Jigsaw
Juice
Jupiter
Parliament
PIN number
Shoes
Triumph

LIST B:

Green things	Bathroom Items	Working Breakfast	Mythical creatures
Apple	Toothbrush	Coffee	Unicorn
Leaves	Tap	Pastries	Dragon
Cactus	Mirror	Cornflakes	Ghost
Fields	Razor	Newspaper	Yeti
Envy	Soap	Commute	Zombie