

NBHS-Study Skills

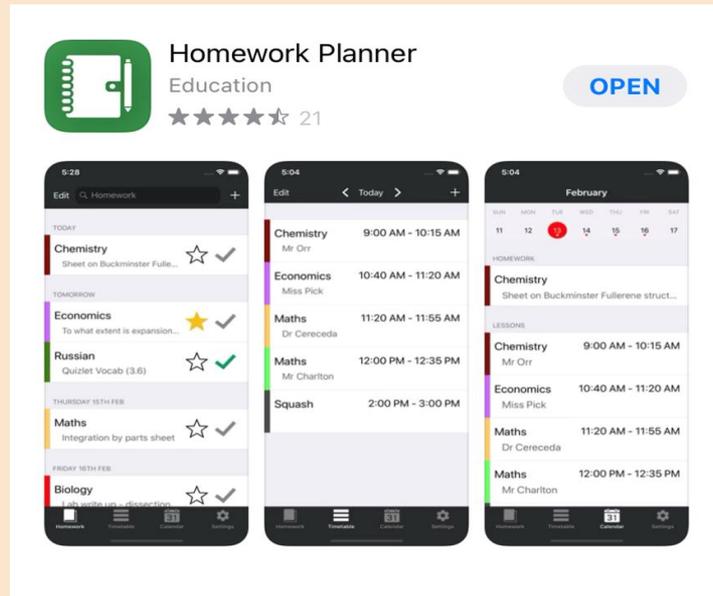
Information Evening-23rd March 2023

Clare Johnston and Emma Hume-Pupil Support (Learning)



Tonight's session:

- How to support students with organisation
- Phones/music-distraction or not?
- How we learn (science of learning)
- Revision techniques
- Useful resources/further information
- Questions



One study has found that simply having your phone out, even if you are not using it, can make you up to 20% worse in cognitive tests. (innerdrive.co.uk)



listening to music doesn't help when revising as it can interfere with the recalling of important information. You aren't allowed to listen to headphones in external exams.

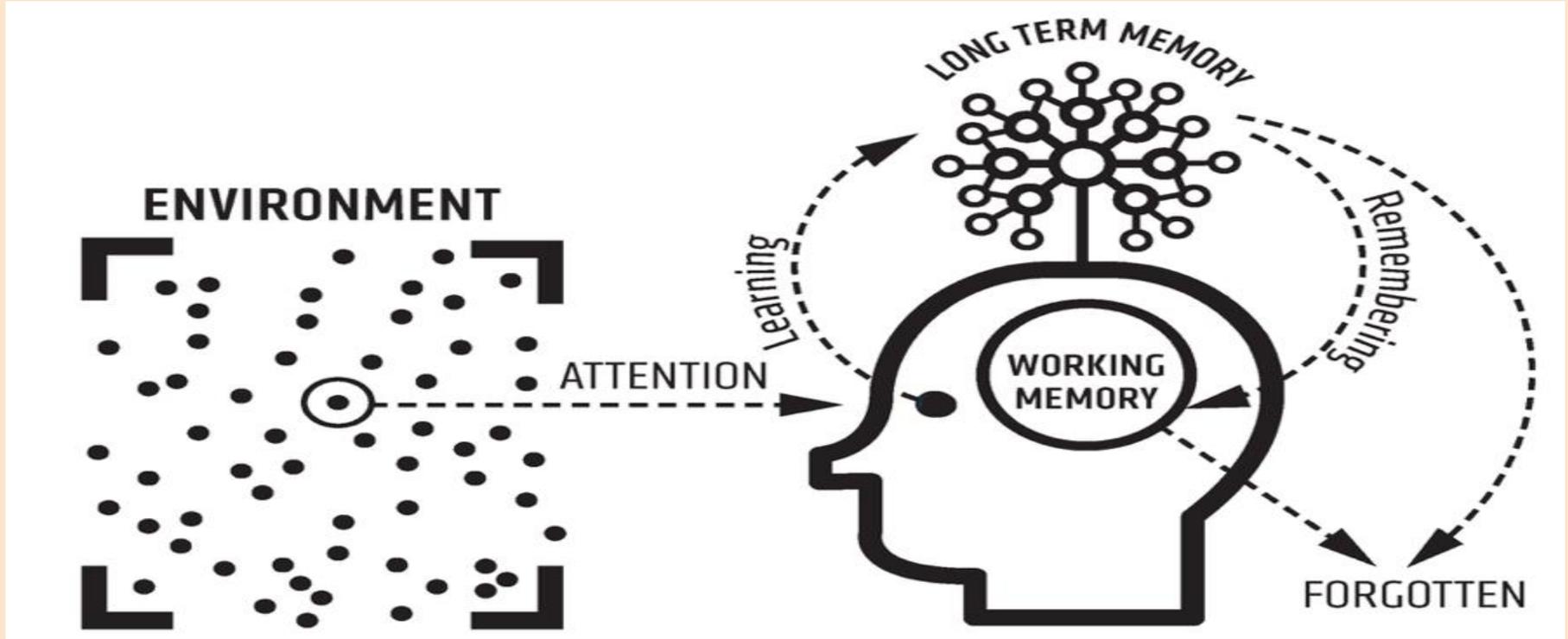
Some students find it helps 'block out' other distractions that may be around them.

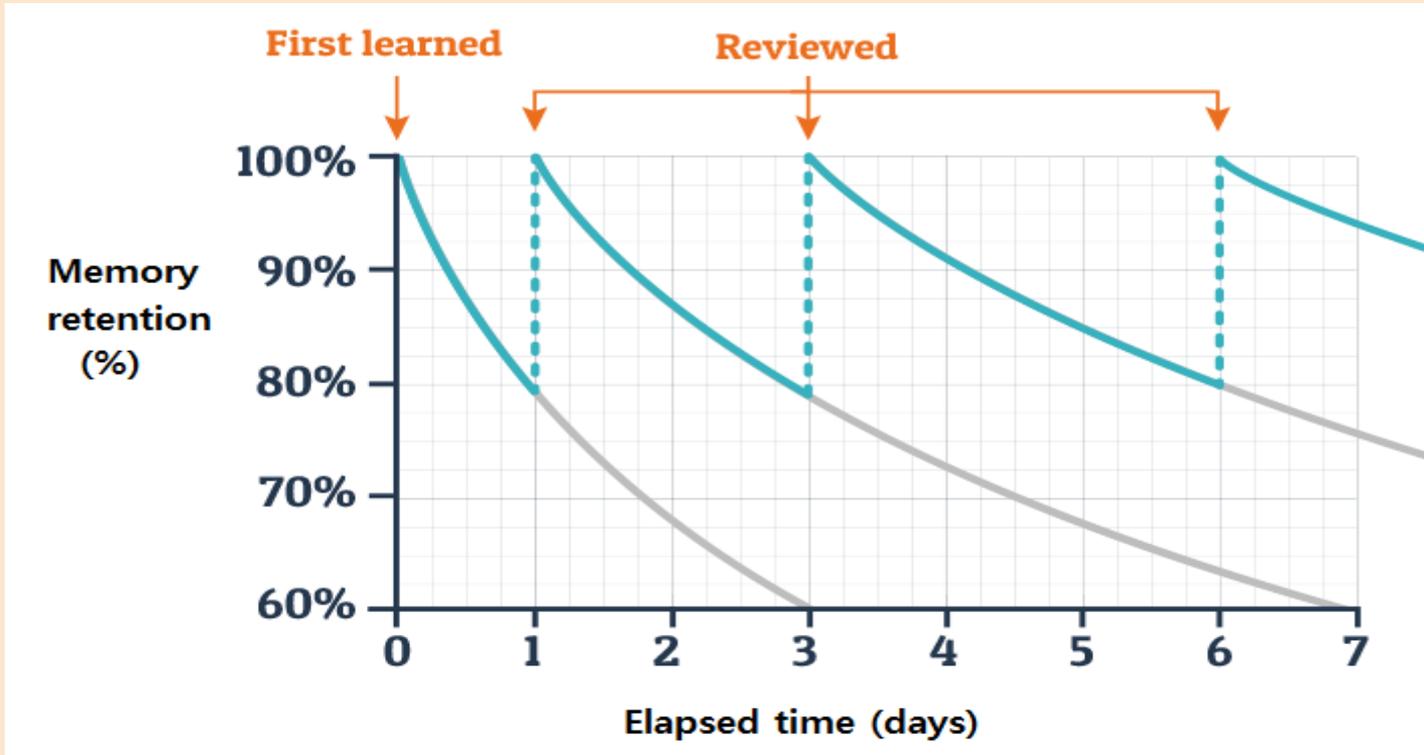
So.....if you are going to listen to music:

1. When is the best time?
2. What type of music?



Memory-The Science of Learning





Ebbinghaus Forgetting Curve (1885)

In summary, what do we know about memory?

- Consistent practice and revisiting material strengthen memory and boosts learning
- Our working memory is finite and limited so overloading this or cramming doesn't work
- Information, if not revisited, is 'lost' from our memory

The Teenage Brain



- It is estimated that we are born with 100 billion neurons (or brain cells)
- Information is passed from one neuron to another via a synapse (tiny gaps between neurons)
- Every time we look, hear, touch, taste or experience something new these connections (synapses) are being made in our brain
- ***The more frequently an experience is repeated the stronger and more extensive these connections are.***



Use it or lose it?

- Strong connections are made when we experience the same stimulus (ie, thought, action, etc) repeatedly - “neurons that fire together, wire together!”

(Shatz, cited in Doidge, 2008)

- During the first year of life in particular, connections are made at such a rapid rate, there is a vast overproduction of them

(Strauch, 2003)

- After this first year our experiences go on to shape the brain:
 - strong connections are retained (and strengthened through a process of myelination)
 - weak connections are discarded or ‘pruned’

(Carter, 2000)

- This period of rapid growth and pruning not only occurs in early childhood but also during adolescence.

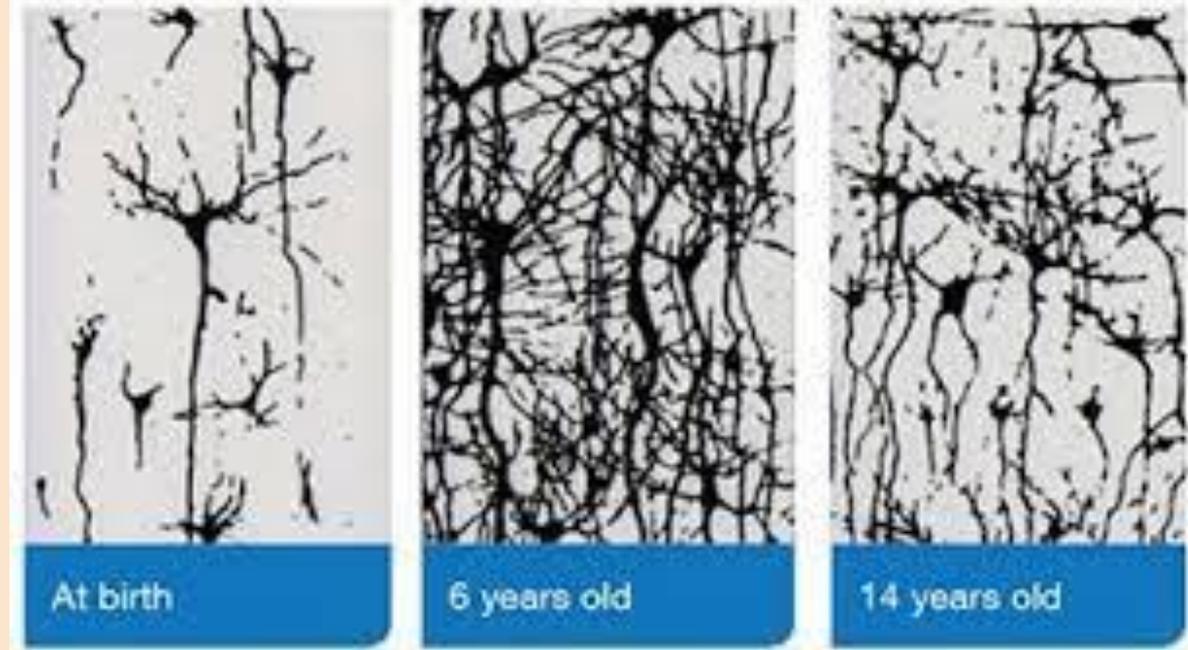
(Morgan, 2007)

Confirmed by neuroscientists, the teenage brain:

- is fundamentally different from children and adults
- is undergoing a dramatic period of remodelling
- is strengthening and pruning back (synaptic) connections in preparation for adulthood.

This continues until their mid 20s.

Giedd [2008]; Morgan [2007];
Blakemore [2012]



Some parts of the brain are maturing faster than others...

Faster:

- Risk seeking/reward seeking
- Emotional arousal and processing
- Desire for social influence and peer affiliation
- Impulse behaviours

(Steinberg, 2008)

Slower:

- Executive functioning skills (planning, organising, prioritising)
- Judging and assessing risks
- Regulating emotions
- Impulse control
- Empathy

(Steinberg, 2008)

In other words...

“The teenage brain has a well developed accelerator but only a part developed brake”





They'll make
you super
smartz!!

But first...



THE POMODORO TECHNIQUE



STEP 1
CHOOSE THE TASK



STEP 2
**SET A TIMER FOR
25 MINUTES**



STEP 3
**WORK ON THE
TASK UNTIL TIMER
BEEPS**



STEP 4
**TAKE A SHORT
BREAK OF 3-5 MIN**



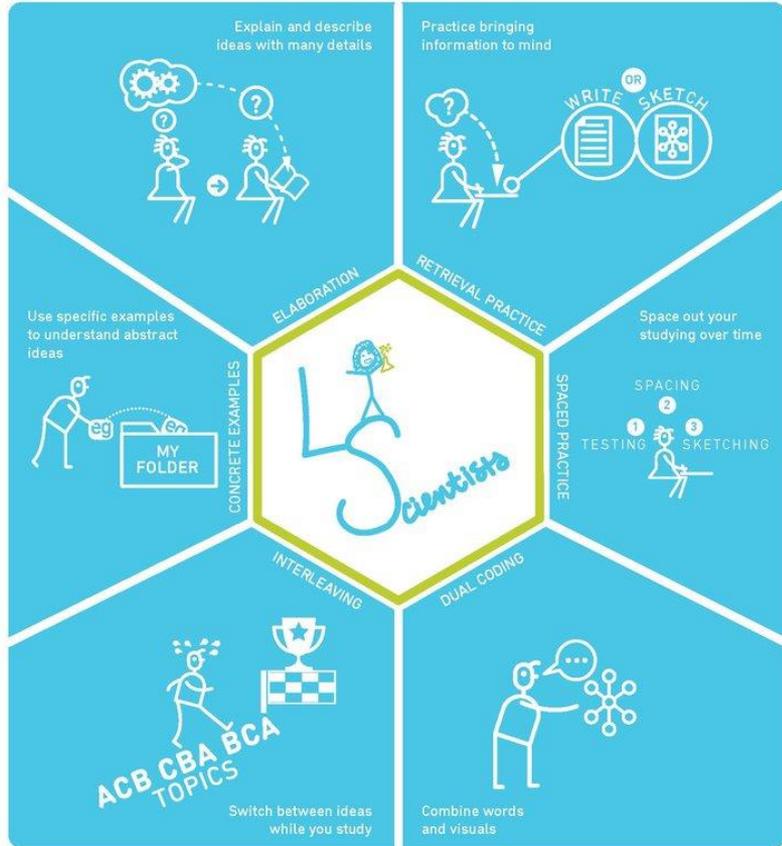
STEP 5
REPEAT THE CYCLE 4 TIMES
TAKE A LONGER BREAK AFTER 4 SESSIONS



Six Strategies for Effective Learning

LEARNINGSOCIETISTS.ORG

All of these strategies have supporting evidence from cognitive psychology. For each strategy, we explain how to do it, some points to consider, and where to find more information.



1. Spaced Practice

1. Retrieval Practice

1. Elaboration

1. Interleaving

1. Concrete examples

1. Dual coding

Spaced Practice

- Plan early for exams
- Set aside time each day
- *Five hours spread out over two weeks is more effective than five hours in a day*
- Review info from each class (but not immediately after class)
- Regularly review older info to keep it fresh in your mind

Retrieval Practice

Elaboration

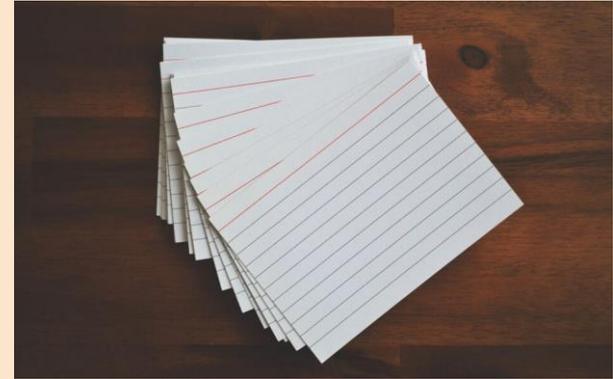
Interleaving

Concrete examples

Dual Coding

What can you do to support your young person?

- Support your young person to get organised - role model!
- Offer to help - flashcards/testing
- Discuss effective study techniques (encourage the techniques from this evening)
- Encourage self-care during exam time (sleep, nutrition, exercise, down time)



For more information...

Podcasts:

- The Exam Study Expert (episode 98. Does Music Help You Study?)
- The Learning Scientist

Information:

- The Learning Scientist website
- Innerdrive website

Further questions - get in touch!

