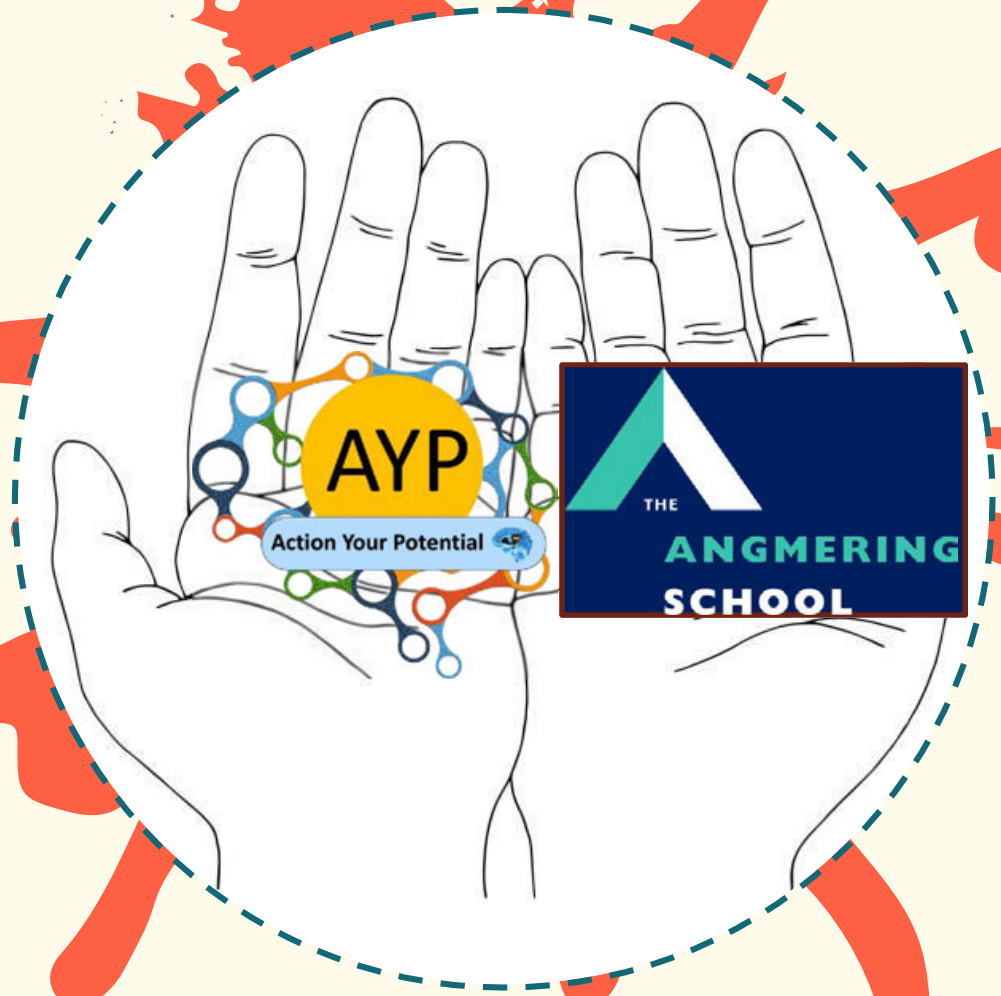
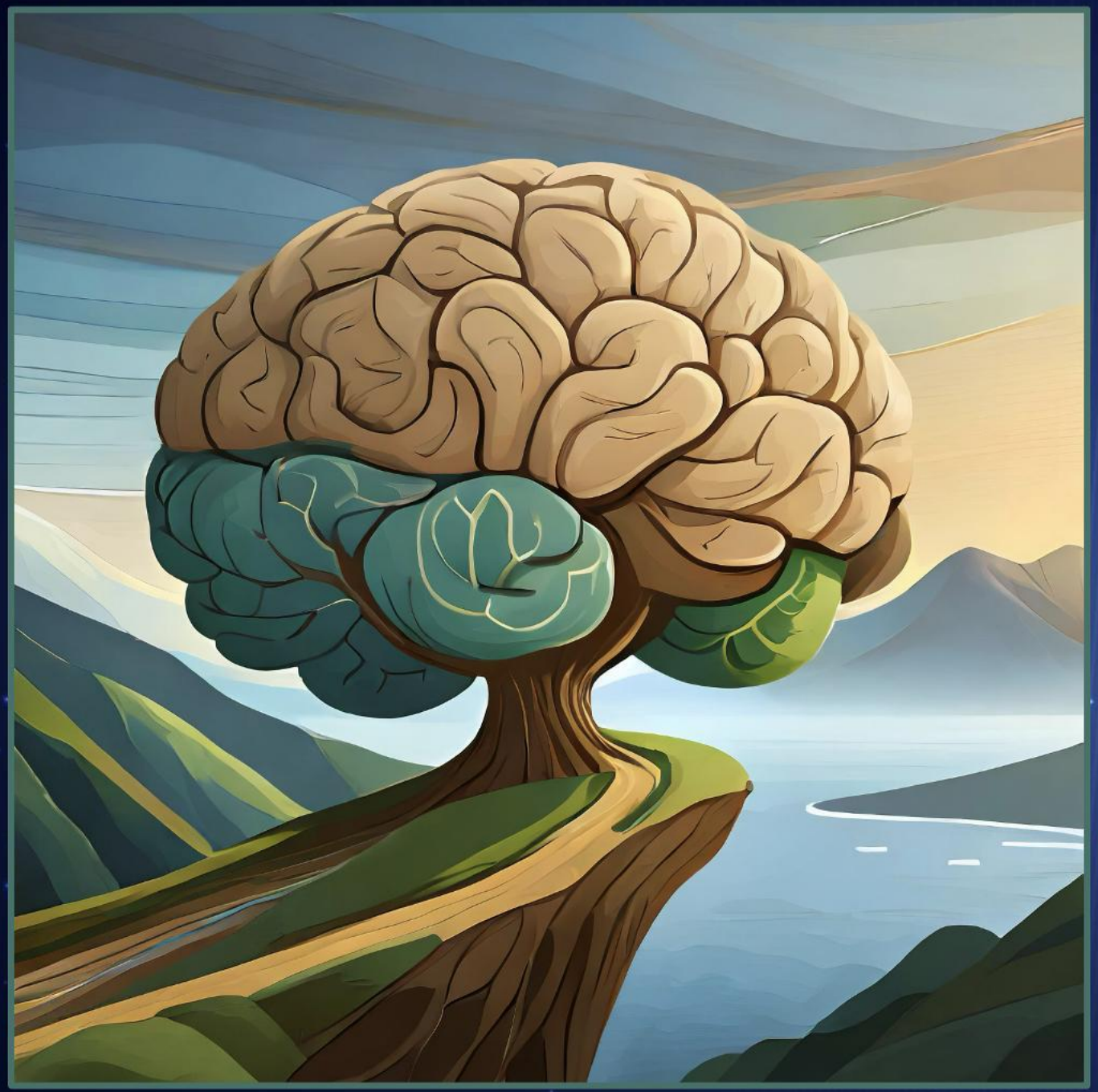
AYP Support For Angmering School Students, Staff, Parents & Carers…





AYP
Action Your Potential

Our mission as an AYP Team...

...saving the world one brain at a time

1/5 + 3/2 = 4/6

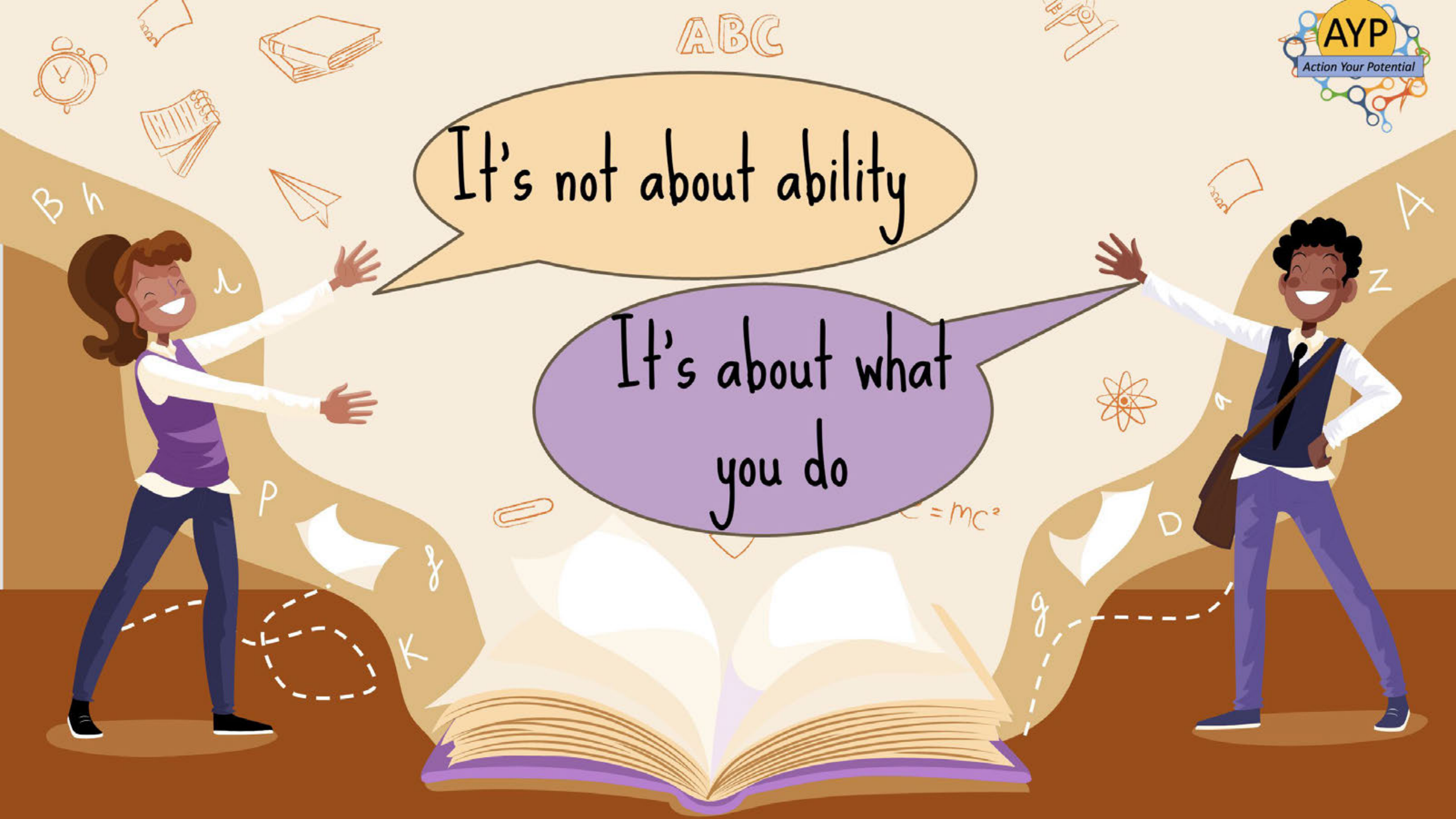
√85

AYP
Action Your Potential

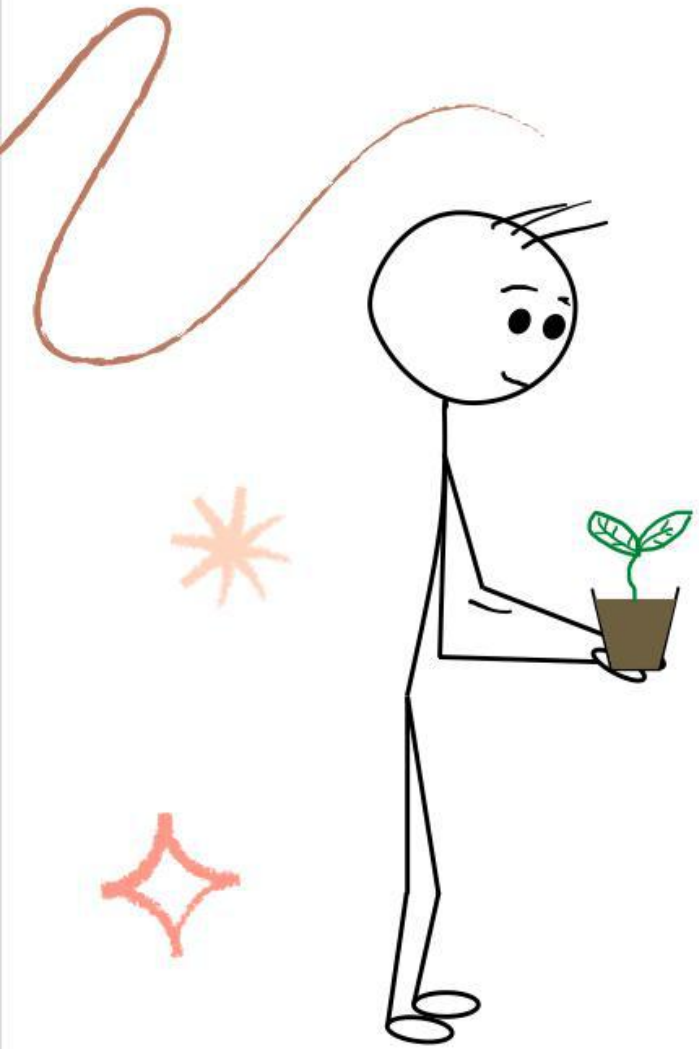
We're here to solve the GCSE problem

Become a #NeuroNinja this year and change your world

$a^2 + b^2 = \sqrt{3c} \rightarrow AB+7$

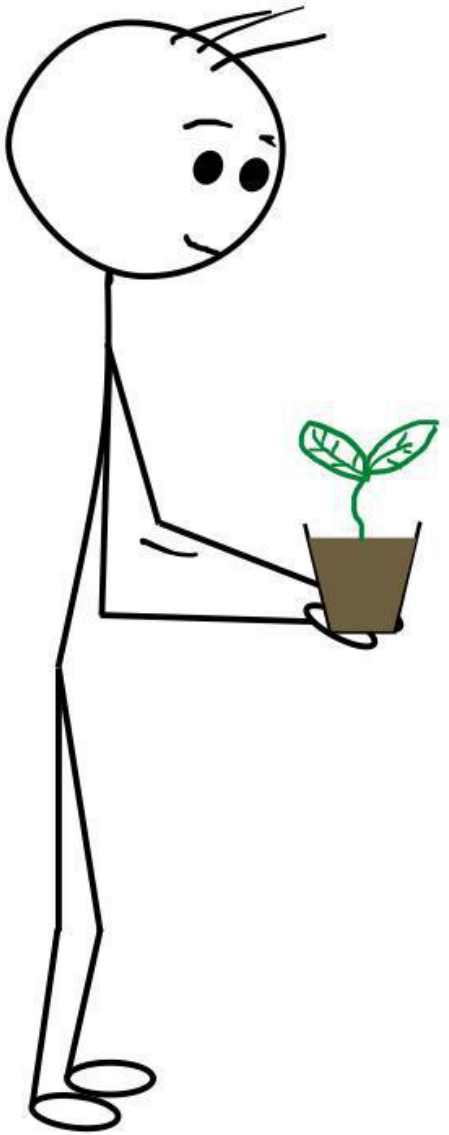

It's not about ability
It's about what you do
ABC
AYP
Action Your Potential

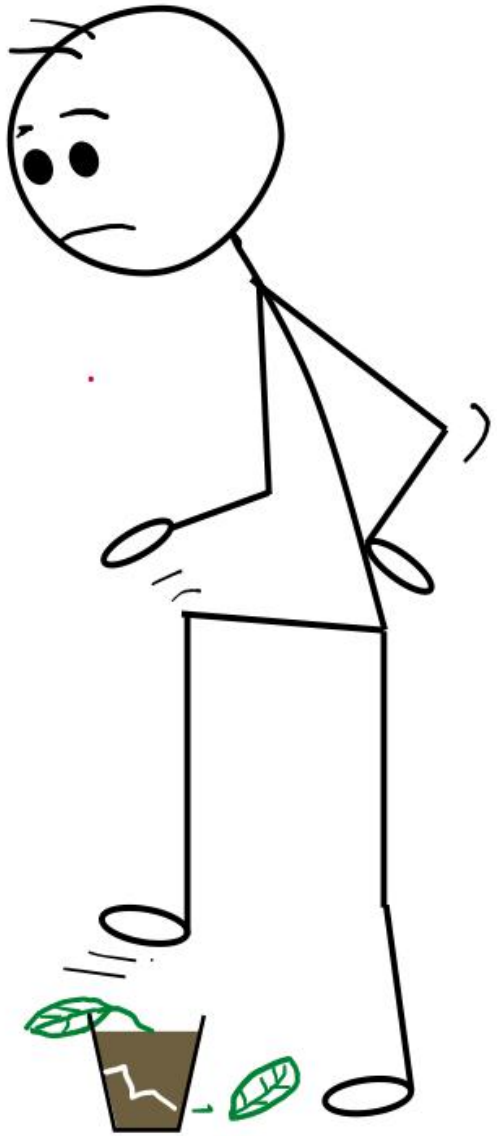
AYP
Action Your Potential



Beliefs and behaviours fall into two categories

Growth-Affirming Beliefs & Behaviours





Growth-Defeating Beliefs & Behaviours

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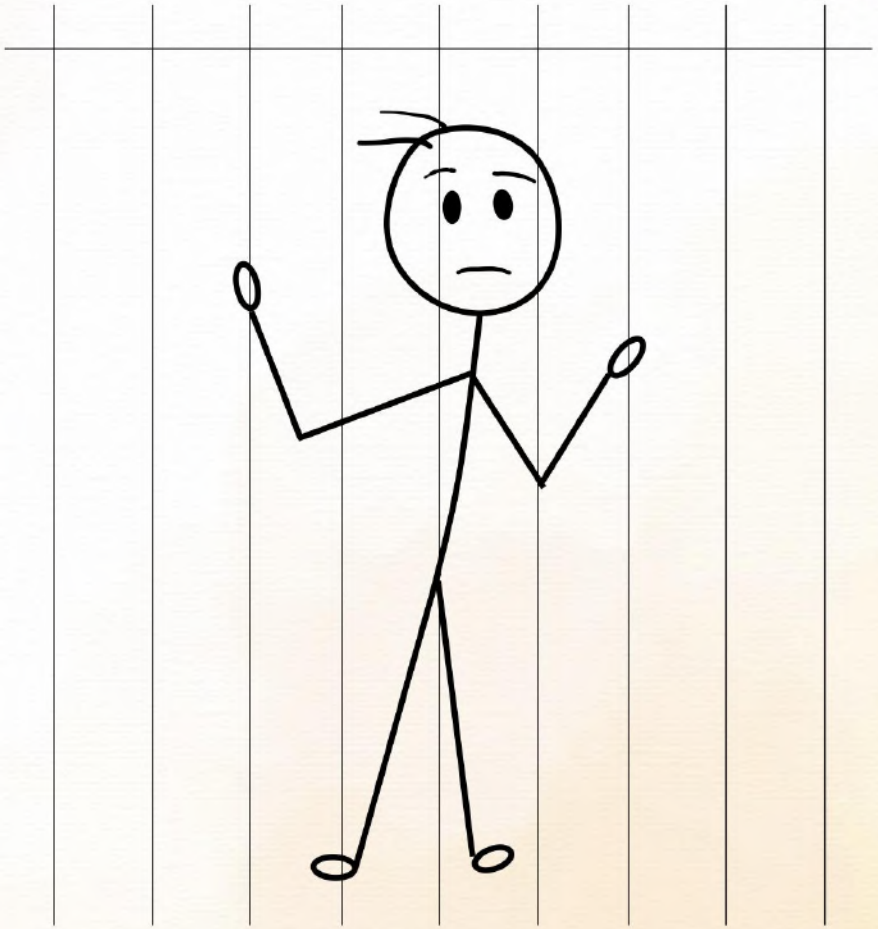
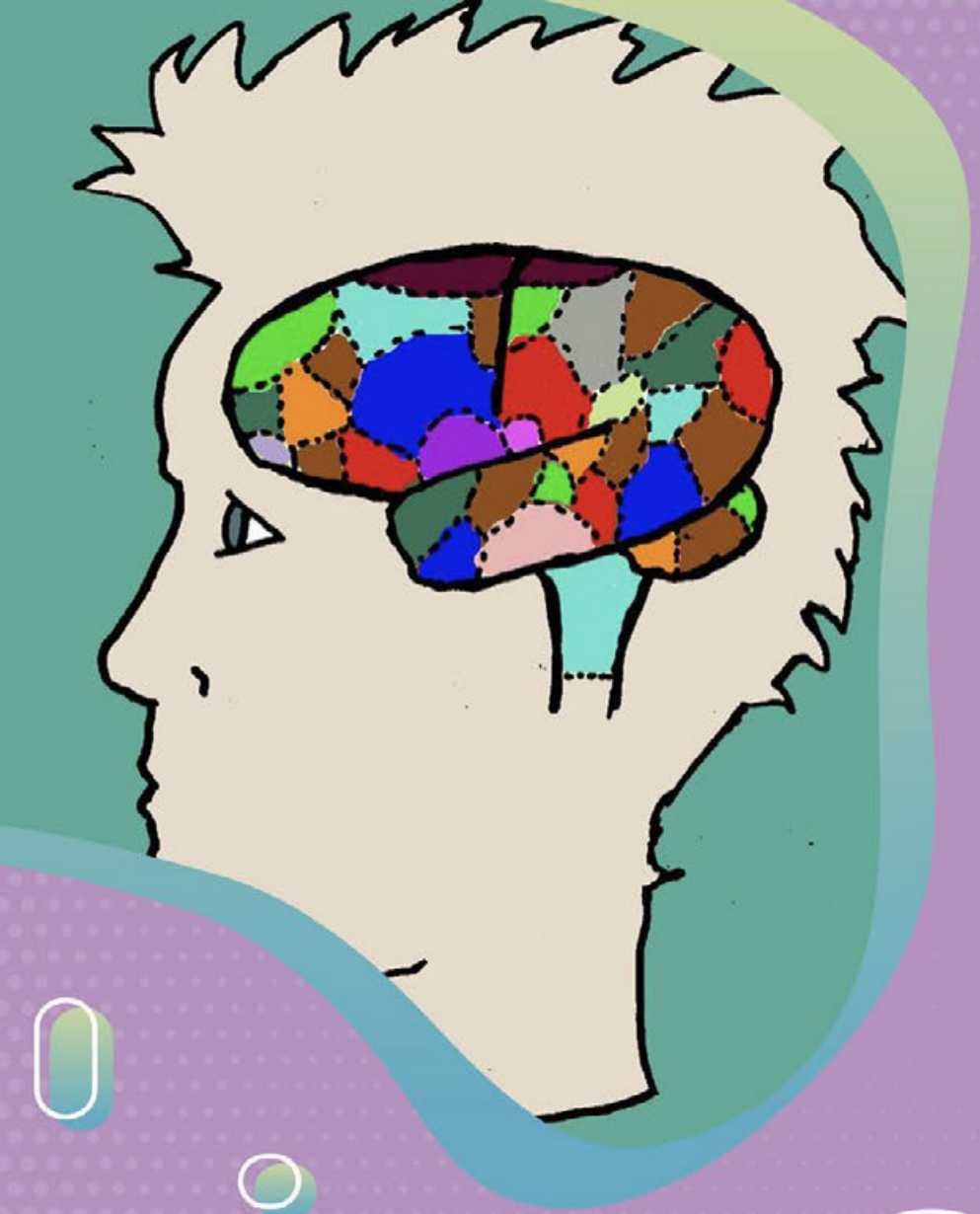
Growth-defeating beliefs are a prison cell that locks from the inside



The message from neuroscience is clear, we are all brain-shapers everyday...



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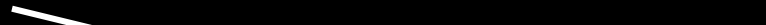
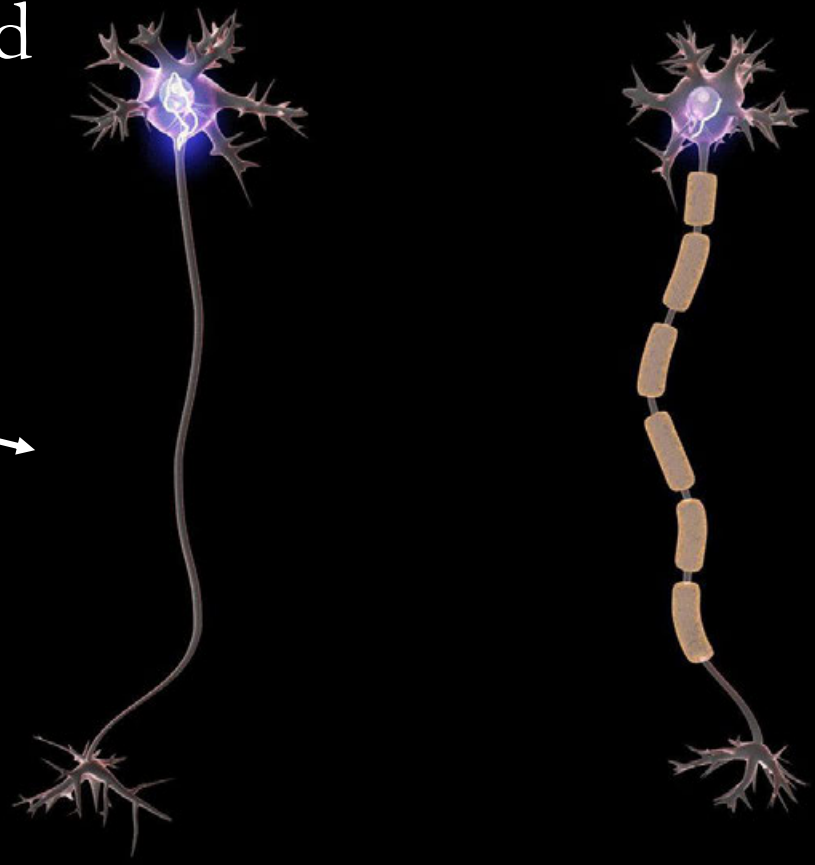
Your brain changes on the basis of what you use it for...

If you repeatedly practice something, your brain and body make it easier for you to do that thing regardless of whether you like that thing, or it is good for you...

Axon

The biological wire that moves electrical impulses from one end of the brain cell to the other





Frazzlement

Stress drains blood from the thinking parts of the brain

What are your positive coping strategies? Things we do deliberately to manage the stress and strain we face as our body, brain and mind respond to change in the world.

- Exercising every day
- Protecting your sleep
- Eating healthily
- Sharing your worries rather than bottling them up
- Walking outside
- Listening to music
- Spend time with family
- Making our space tidy

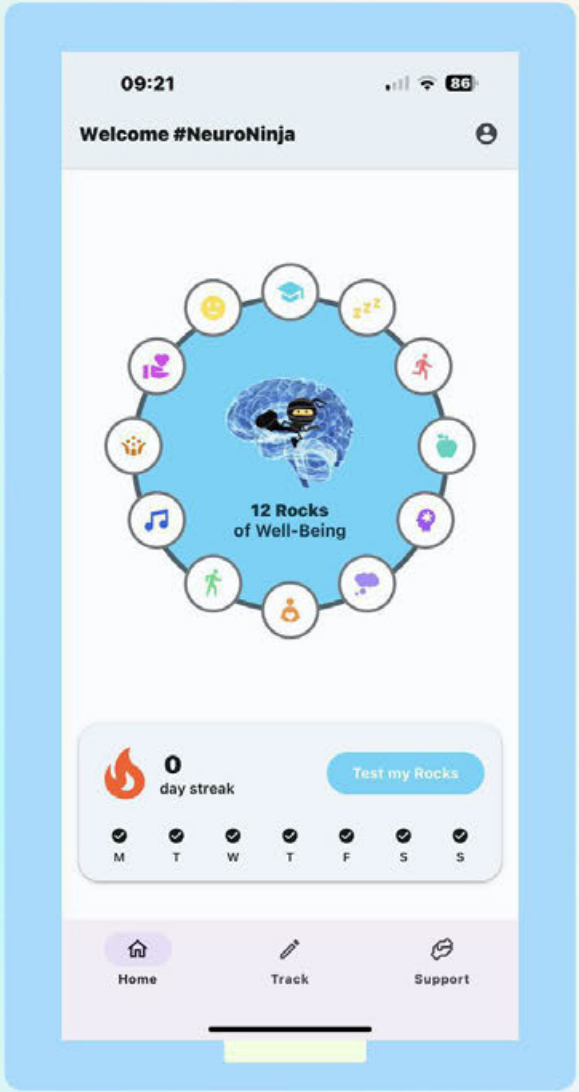
- Playing sport
- Writing a journal
- Being creative
- Practicing our faith
- Social activities
- Dancing
- Learning something new
- Cooking a meal

- Charitable works
- Looking after your pet
- Thinking positively
- Reading a good book
- Breathing exercises
- Mindfulness
- Managing our worries

The 12 Rocks of Well-Being

Rock 1 -Sleep: 8-9 Hours a night
Rock 2 - Exercise: 20 minutes per day
Rock 3 - Eat and drink healthily
Rock 4 - Mindfulness: 5-10 mins per day
Rock 5 - Mind wandering: allow your mind to problem solve
Rock 6 - Manage emotions: notice, accept, share
Rock 7 - Walk outside in nature
Rock 8 - Listen to music
Rock 9 - Connect with friends and family
Rock 10 - Gratitude and Kindness: express both explicitly
Rock 11 - Flow: do what you love
Rock 12 - Learn, play, create, read

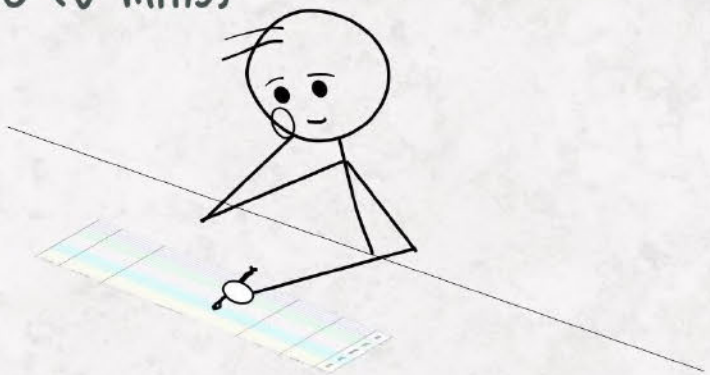
NeuroNinja App



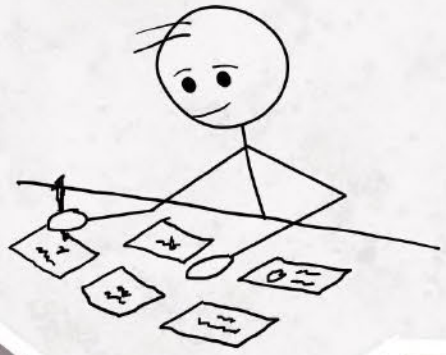
...Available Now...

KS4 - Learning Routines - Each Day

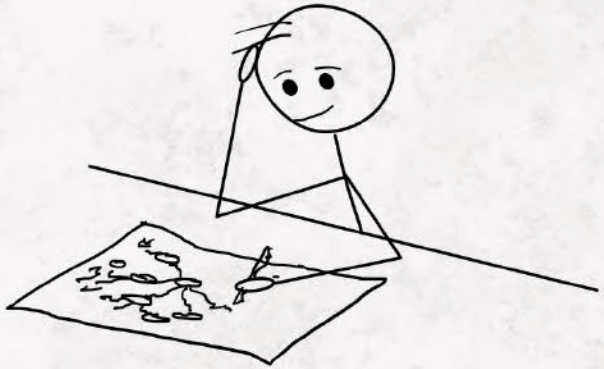
1- Study Capture (5 mins)



2- Flash Cards (5 mins)

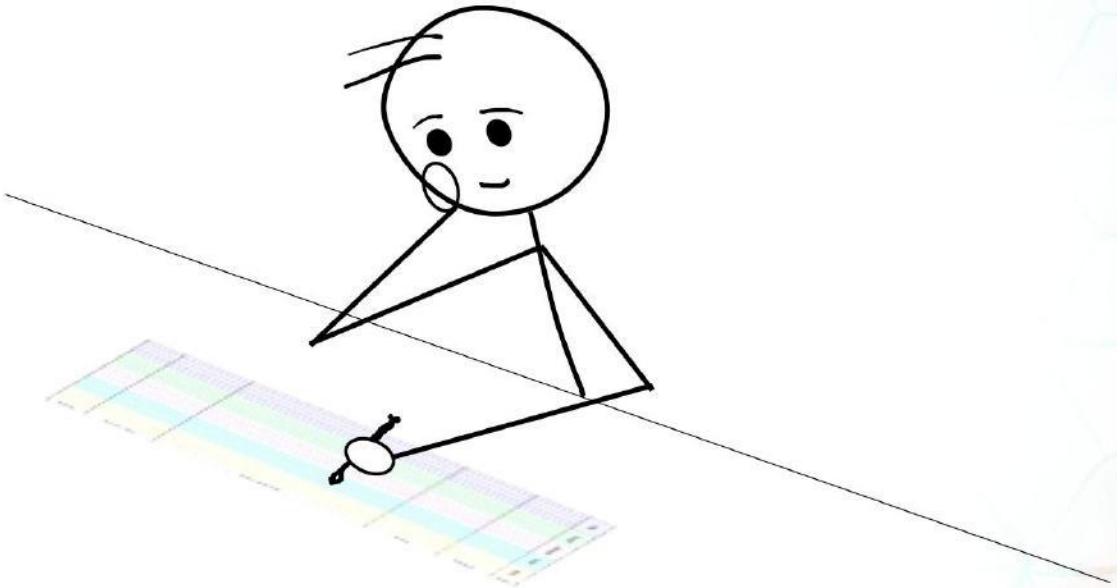


3- Mind Map Build/Review (5 mins)



4- Effortful Subjects (10 mins)

Study Capture



How we think we Learn...

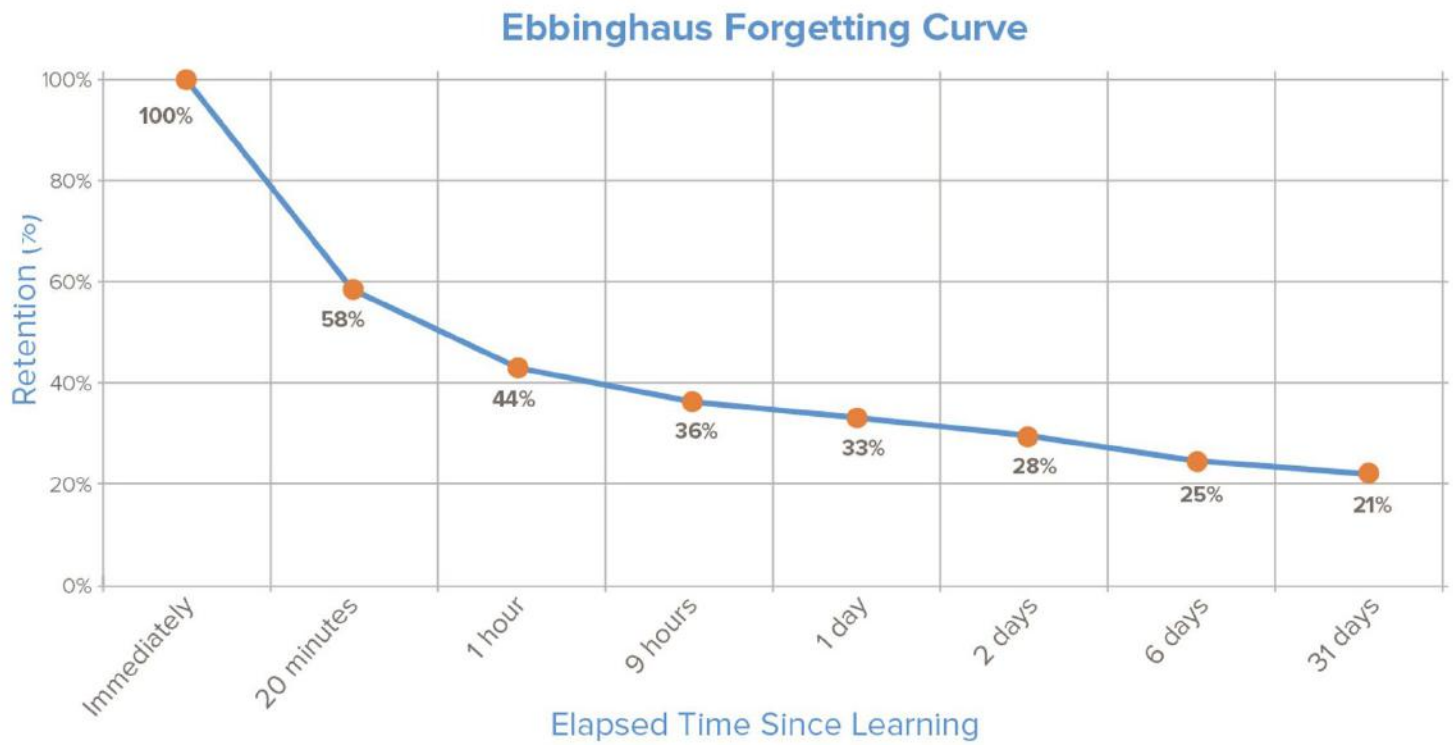
I've got it - lets move on

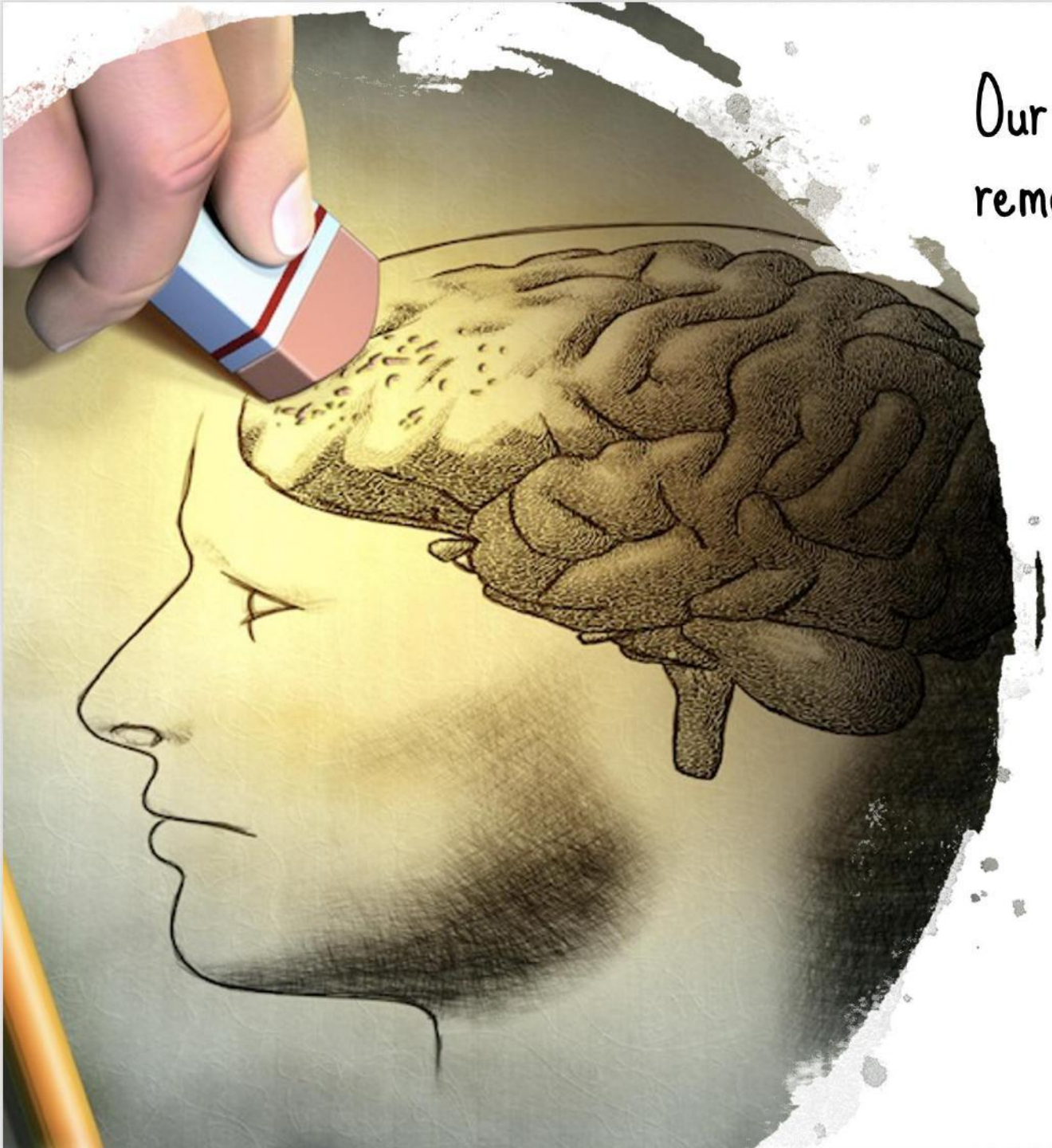
But...

Within 1 Hour - you have forgotten 56% of it

Within 1 day - 67%

Within a Week - 75%





Our Brain finds it easiest to remember information that is;

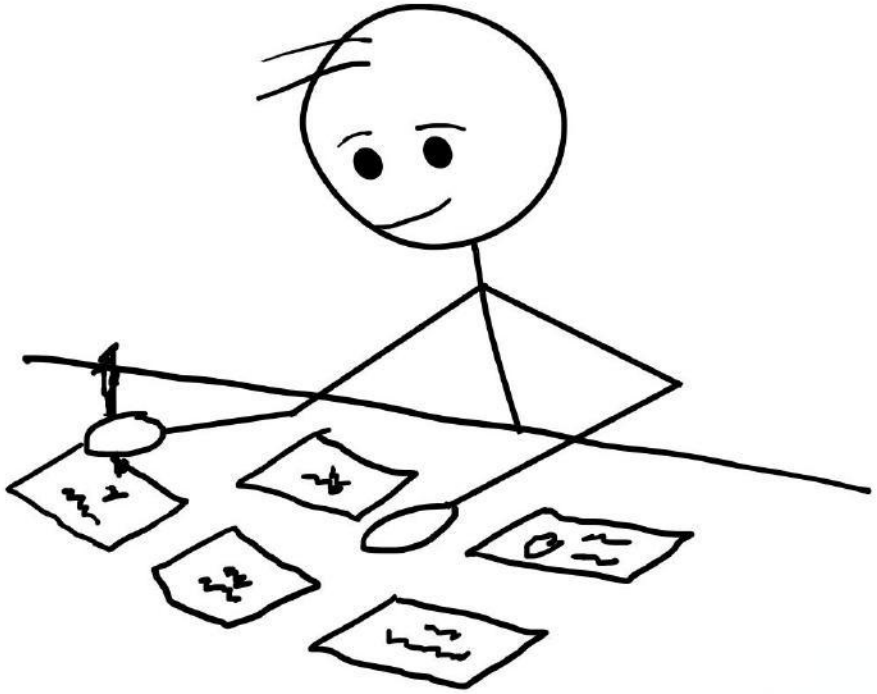
1. Dangerous to us
2. Salient (Interesting to us)
3. Repeated

So...If you don't repeat, your brain will delete...

Study Capture Sheet

Date	Subject	Topic	Key Take away	Key words	Rating
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					

Flash Cards



Science Example

Front	Back
what is 'current?'	A flow of electrons measured in amps (A)

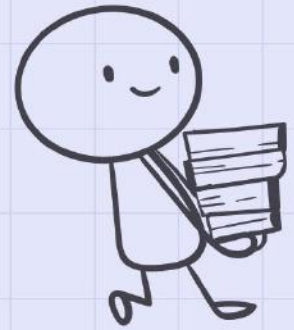
Frayer Flash Cards

Statement	Elaborate
Write a simple statement about what you are making the flashcard about	Give more explanation
Example	**Image**
Provide any examples	Include a helpful image

Frayer Flash Cards

EXAMPLE

Statement	Elaborate
Radioactivity: Particles and waves emitted from the nuclei of isotopes of unstable atoms.	
Example	**Image**



Frayer Flash Cards

EXAMPLE

Statement

Radioactivity:
Particles and waves emitted from the nuclei of isotopes of unstable atoms.

Elaborate

Radioactivity:
Is emitted from the nuclei of isotopes of unstable atoms. Isotopes are atoms with the same number of protons but different numbers of neutrons in the nucleus. E.g. O^{16} and O^{18}
These have unstable nuclei and emit alpha or beta particles, or gamma waves, or neutrons. Alpha particles have 2 protons and 2 neutrons. Are positively charged and are absorbed by paper. Beta particles are electrons from the nucleus. Are negatively charged and absorbed by 2-3cm of aluminium. Gamma radiation is waves of energy emitted from the nucleus. Have no charge and absorbed by thick lead, several cm.

Example

Image

Frayer Flash Cards

EXAMPLE

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Example

Properties of radiation

	Alpha	Beta	Gamma
Charge	+2	-1	0
Mass	2	0	0
Ionisation power	High	Middle	Low
Penetration in air	< 5cm	< 1m	< 1km
Stopped by	Paper	Aluminium	Lead

Image

Frayer Flash Cards

EXAMPLE

Statement

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Particles and waves emitted from the nuclei of isotopes of unstable atoms.

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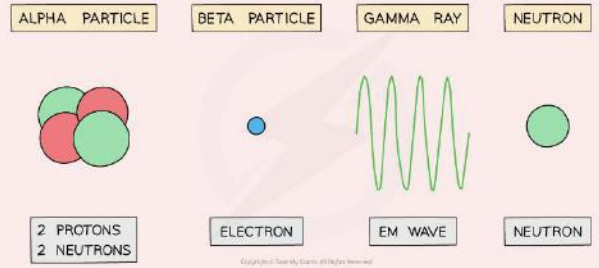


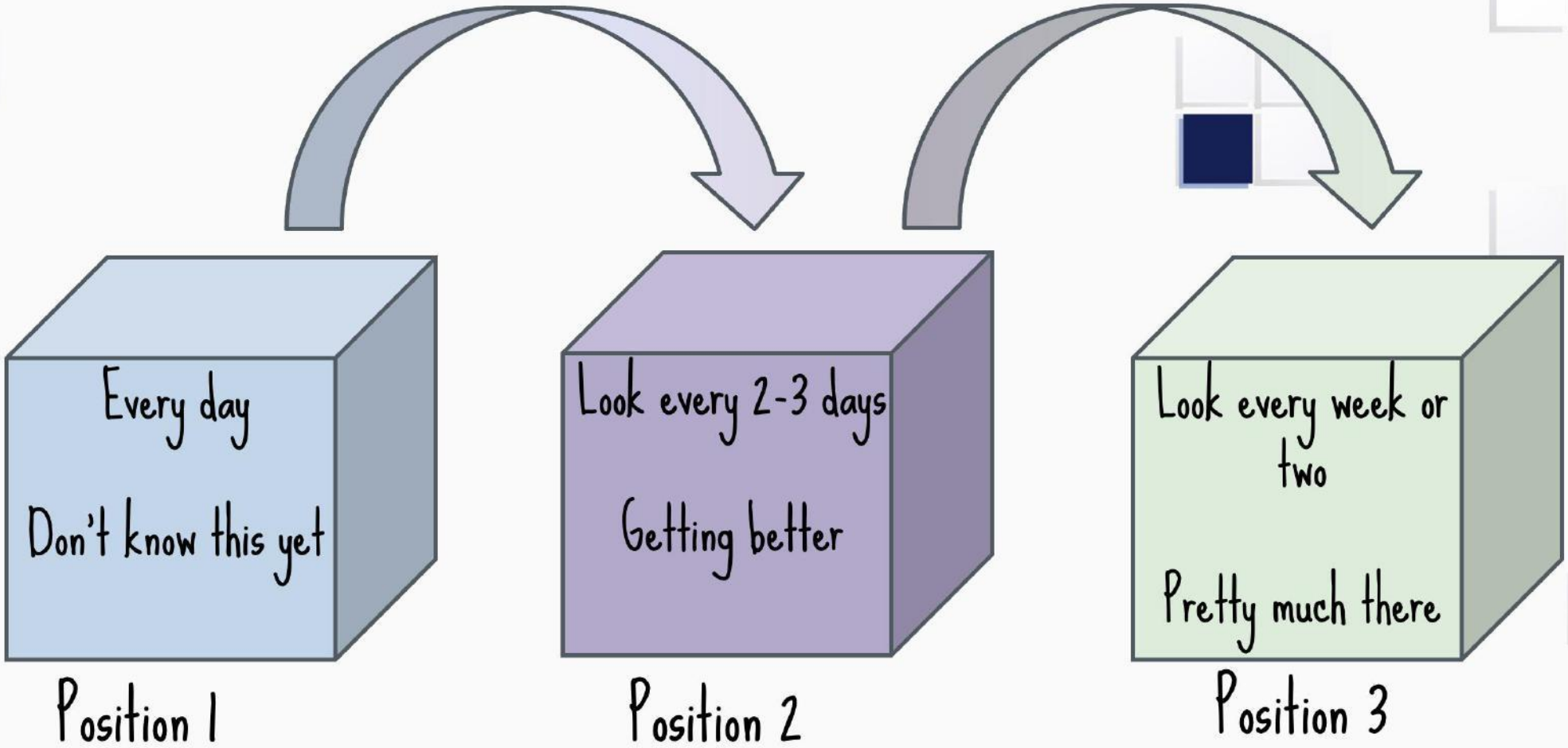
Flashcards

Day	Colour of flashcard	Subject

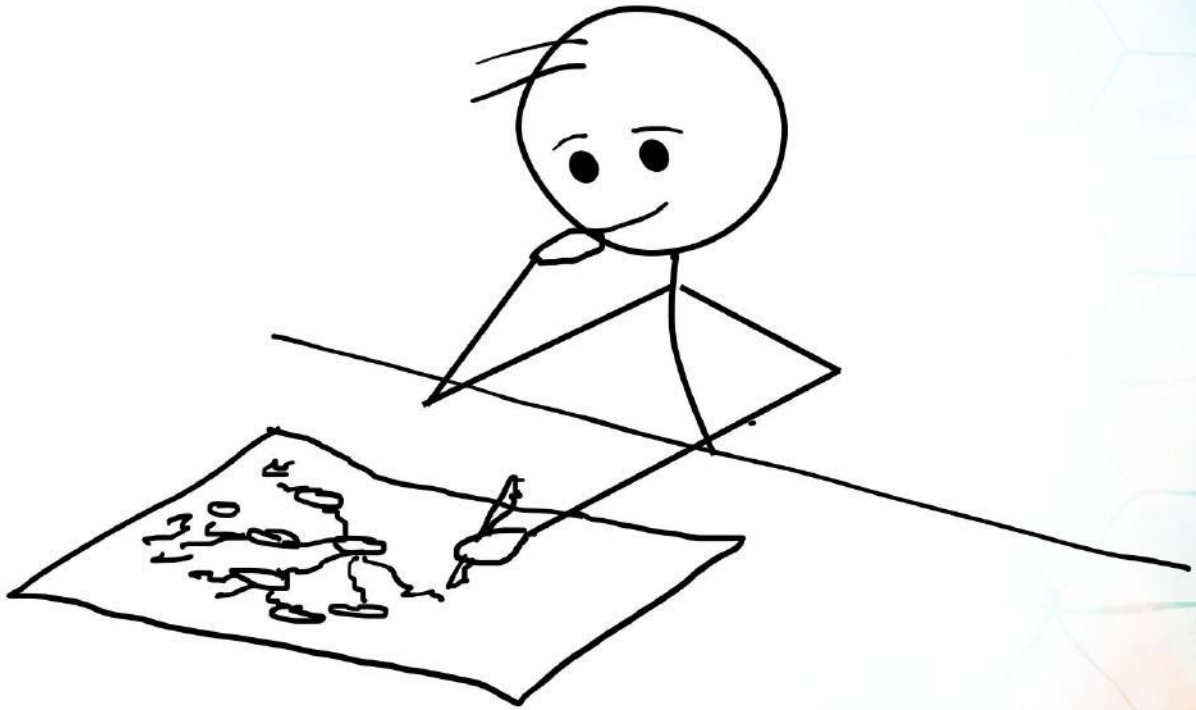
Flashcards - e.g.

Day	Colour of flashcard	Subject
Monday week 1	Pink	English
Tuesday week 1	Green	Maths
Wednesday week 1	Yellow	French
Thursday week 1	Orange	Geography
Friday week 1	Day off	Day off
Saturday week 1	Blue	Biology
Sunday week 1	Day off	Day off
Monday week 2	Pink	History
Tuesday week 2	Green	PE
Wednesday week 2	Yellow	Art
Thursday week 2	Orange	Chemistry
Friday week 2	Day off	Day off
Saturday week 2	Blue	Physics
Sunday week 2	Day off	Day off

The box system

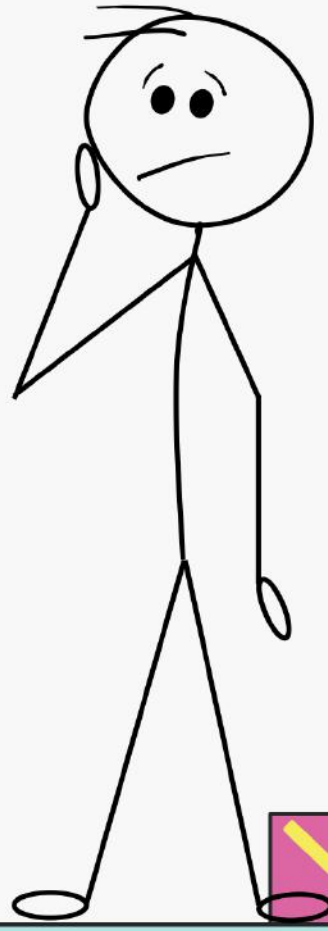


Mind maps



Effortful Topics

Study Revolution:



AYP
Action Your Potential

What is the best way to revise?

But we build up to that through small steps which we're going to work you through.

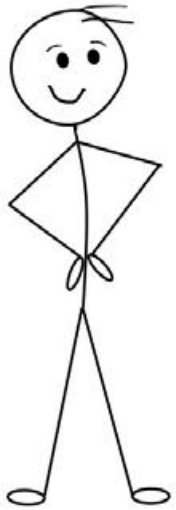
We're going to take you from...

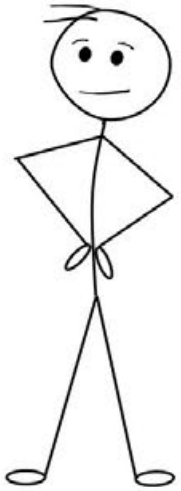
to Study Hero...

Study Zero

Confidence Chart -GCSE

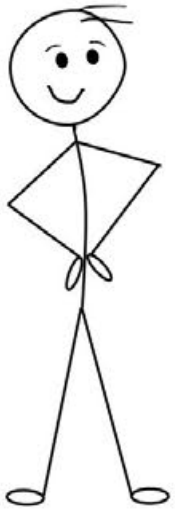
Subject	Grade You Want	Grade Stretch Goal	Current Confidence level

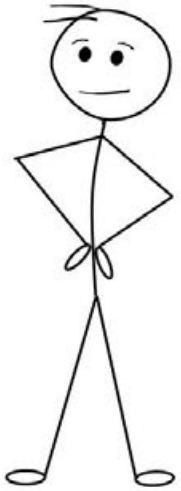




Confidence Chart -GCSE

Subject	Grade You Want	Grade Stretch Goal	Current Confidence level
Maths	5	6	
English Lang	5	6	
English Lit	5	6	
Chemistry	6	7	
Physics	5	6	
Biology	6	7	
French	4	5	
Geography	6	7	
Tech	6	7	
RE	4	5	





What is a study rep?

3 types of rep

- **Learning rep** — Do this when you don't understand or don't remember a topic
- **Practice rep** — Do this when it's a bit hazy
- **Testing rep** — Do this when you need to test yourself

What is it all about?

Repetition - a carefully designed study slot that works with the memory and learning systems of our brains to achieve maximum impact for learning, understanding and recall

Key Attitudes

Grit - Keeping going
Attention - 1 thing at a time
Focus - don't get distracted internally or externally
Attitude - Can do
Mode - taking responsibility

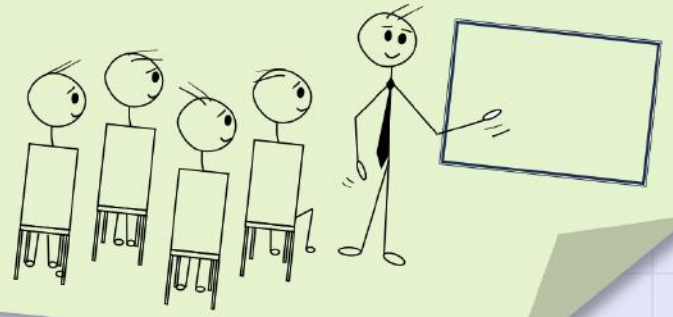
How long does it take?

25 minutes

How does learning work at the level of the brain?

Learning is 3 processes

Getting it - understanding what you have been taught



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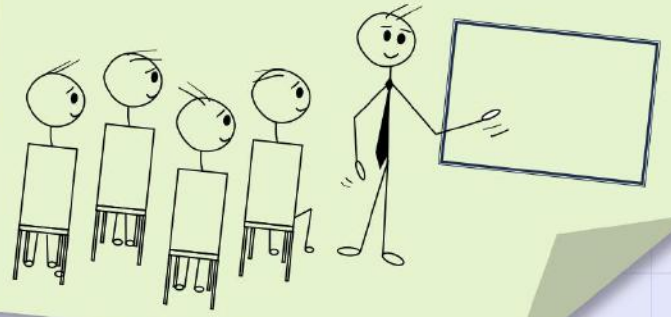
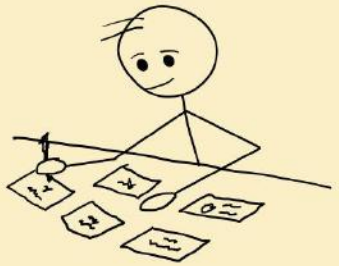


Practicing it - Encoding it in the brain



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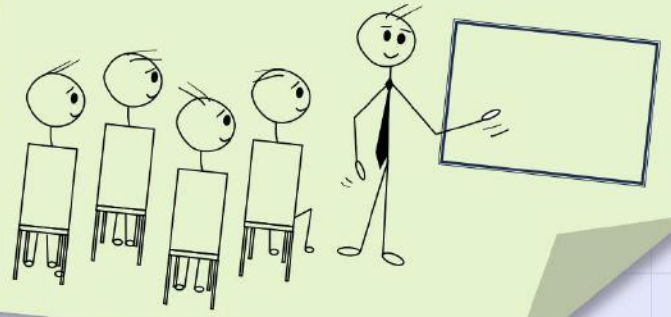

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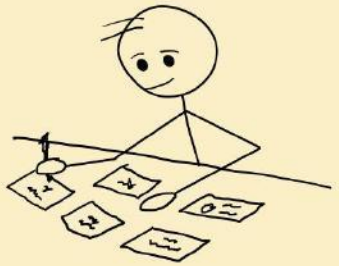
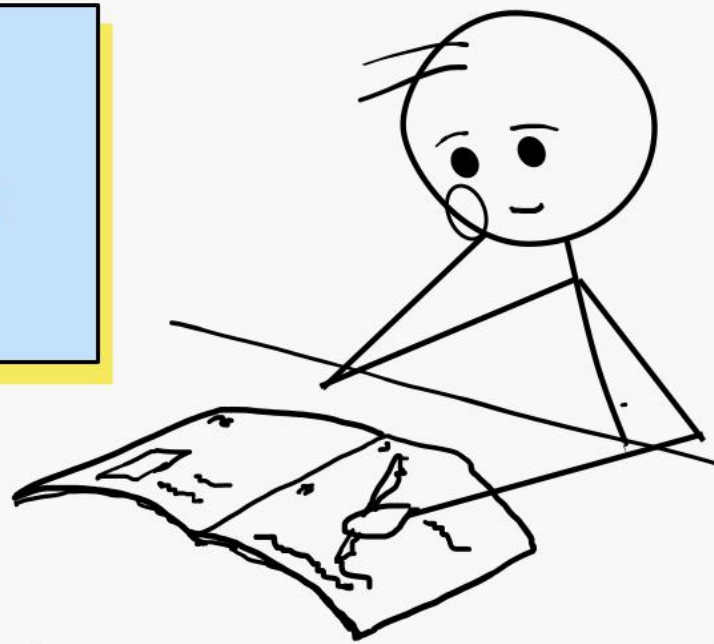


Using it - Applying the new learning

Study Revolution:



Taking Responsibility for what you know using study reps

example

1 Choose a topic and write down what you know about it

Topic - Radioactivity 5 mins

- Something to do with atoms
- Small particles
- Waves?
- Can harm you
- Alpha
- Nuclear

Learning Rep

example

1 Choose a topic and write down what you know about it

Topic - Radioactivity 5 mins

- Something to do with atoms
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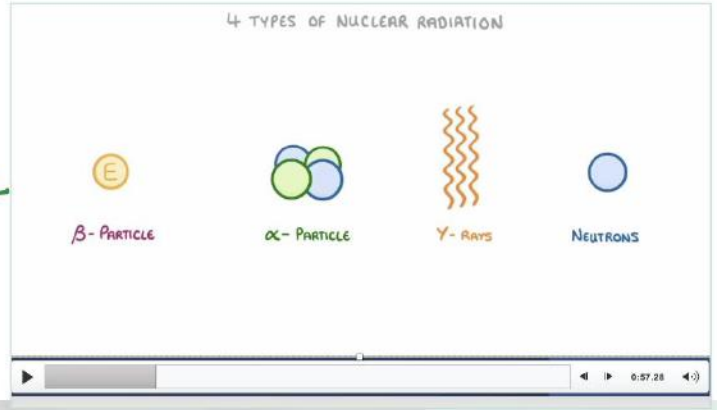
Learning Rep

2 10 mins

Study the resource



example

Learning Rep

1 Choose a topic and write down what you know about it

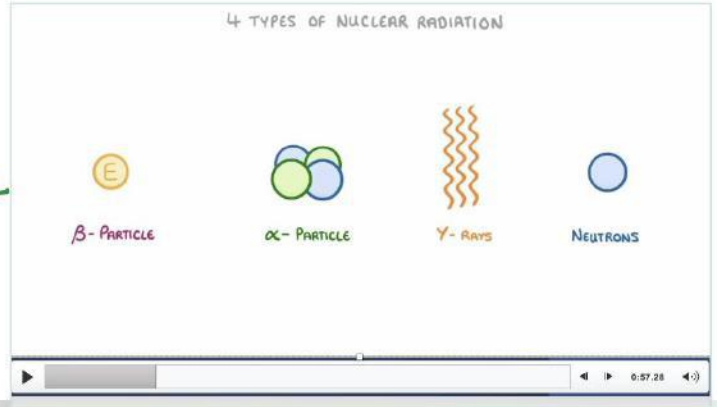
Topic - Radioactivity

5 mins

- Something to do with atoms
- Small particles
- Waves?
- Can harm you
- Alpha
- Nuclear

2 Study the resource

10 mins



3 "Summarise by taking notes whilst using the resource... Video, Revision Guide, Class Notes.."

Radioactivity: Emitted from unstable atoms called isotopes.
Isotopes = Atoms with the same number of protons, but different numbers of neutrons

Alpha particles: 2 protons and 2 neutrons. Quite large particles. Travel a small distance. Absorbed by a thin layer of paper

Beta particles: A small negatively charged particle from the nucleus. A neutron splits into a proton and an electron. Have less mass and travel further in air. Absorbed by a thin layer of Aluminium

Gamma waves (rays): A wave of energy released form the nucleus of an unstable isotope. Absorbed by very thick lead or metres of concrete

Neutrons: Emitted by an unstable isotope with too many neutrons in the nucleus. Can cause a chain reaction.

10 mins

example

1 Choose a topic and write down what you know about it

Topic - Radioactivity 5 mins

What are the key ideas?

Practice Rep

- Alpha: 2 neutrons and 2 protons
- Beta: negative electron form the nucleus
- Gamma: Wave of energy
- Alpha least penetrating, gamma most
- Alpha most ionising, gamma least ionising
- Neutrons are released from unstable nuclei

example

Practice Rep

1 Choose a topic and write down what you know about it

Topic - Radioactivity 5 mins

What are the key ideas?

- Alpha: 2 neutrons and 2 protons
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- Gamma: Wave of energy
- Alpha least penetrating, gamma most
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- Neutrons are released from unstable nuclei

2 Make flashcards, mind map or summary notes.

15 mins

Radioactivity: Particles and waves emitted from the nuclei of isotopes of unstable atoms.

Isotope: Atoms with the same number of protons but different numbers of neutrons in the nucleus e.g., O^{16} and O^{18}

Alpha radiation: Particles that have 2 protons and 2 neutrons. Are positively charged. Absorbed by paper.

Beta radiation: Are electrons from the nucleus. Are negatively charged. Absorbed by 2-3cm of aluminium.

Gamma radiation: Waves of energy emitted from the nucleus. Have no charge. Absorbed by thick lead, several cm.

example

Practice Rep

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3 Read through 5 mins

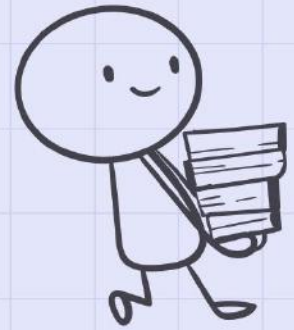
Frayer Flash Cards

Statement	Elaborate
Write a simple statement about what you are making the flashcard about	Give more explanation
Example	**Image**
Provide any examples	Include a helpful image

Frayer Flash Cards

EXAMPLE

Statement	Elaborate
Radioactivity: Particles and waves emitted from the nuclei of isotopes of unstable atoms.	
Example	**Image**



Frayer Flash Cards

EXAMPLE

Statement

Radioactivity:
Particles and waves emitted from the nuclei of isotopes of unstable atoms.

Elaborate

Radioactivity:
Is emitted from the nuclei of isotopes of unstable atoms. Isotopes are atoms with the same number of protons but different numbers of neutrons in the nucleus. E.g. O^{16} and O^{18}
These have unstable nuclei and emit alpha or beta particles, or gamma waves, or neutrons. Alpha particles have 2 protons and 2 neutrons. Are positively charged and are absorbed by paper. Beta particles are electrons from the nucleus. Are negatively charged and absorbed by 2-3cm of aluminium. Gamma radiation is waves of energy emitted from the nucleus. Have no charge and absorbed by thick lead, several cm.

Example

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Example

Properties of radiation

	Alpha	Beta	Gamma
Charge	+2	-1	0
Mass	2	0	0
Ionisation power	High	Middle	Low
Penetration in air	< 5cm	< 1m	< 1km
Stopped by	Paper	Aluminium	Lead

Image

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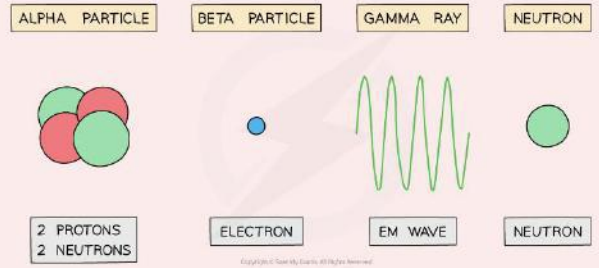

example

1 Find the past paper question and mark scheme

Topic - Radioactivity

5 mins

Testing Rep

example

1 Find the past paper question and mark scheme

Topic - Radioactivity

5 mins

Testing Rep

2 Have a go at the question

The chart below shows the change in mass number and atomic number of an atom for different types of radioactive decay.

	change in atomic number	change in mass number
A	-1	0
B	-2	-4
C	0	0
D	+1	0

(a) Write down the letter which shows how the mass number and atomic number change for the following:

(i) emission of an alpha particle

.....[1]

(ii) emission of a beta particle

.....[1]

(iii) emission of gamma radiation

.....[1]

(b) Complete the equation below to show the decay of $^{238}_{92}U$ to an isotope of thorium (Th) when it emits an alpha particle. [2]

$^{238}_{92}U \rightarrow$

(c) $^{238}_{92}U$ and $^{235}_{92}U$ are both forms of uranium.

(i) What do we call different forms of the same element?

.....[1]

(ii) Describe how their nuclei differ from each other.

.....[1]

15 mins

example

1 Find the past paper question and mark scheme

Topic - Radioactivity

5 mins

Testing Rep

3 Use the mark scheme to add what was missed.

5 mins

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15 mins

What is a study rep?

3 types of rep

- **Learning rep** — Do this when you don't understand or don't remember a topic
- **Practice rep** — Do this when it's a bit hazy
- **Testing rep** — Do this when you need to test yourself

Your Learning Day Plan

We need to balance study, well-being and mind management

The plan should have these elements

Learning and practice reps for each subject- (green)

Testing reps for each subject- (orange)

Well-being time- (yellow)

Personal time- (purple)

Planning slot- (grey)

General Planner - Week 1

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7-8am							
8-9am							
9-10am							
10-11am							
11-12pm							
12-1pm							
1-2pm							
2-3pm							
3-4pm							
4-5pm							
5-6pm							
6-7pm							
7-8pm							
8-9pm							
9-10pm							
10-11pm							

Be in no doubt you
can do this...