

REVISION



STRATEGIES
FOR SUCCESS

What can you do
to make REVISION
more effective?

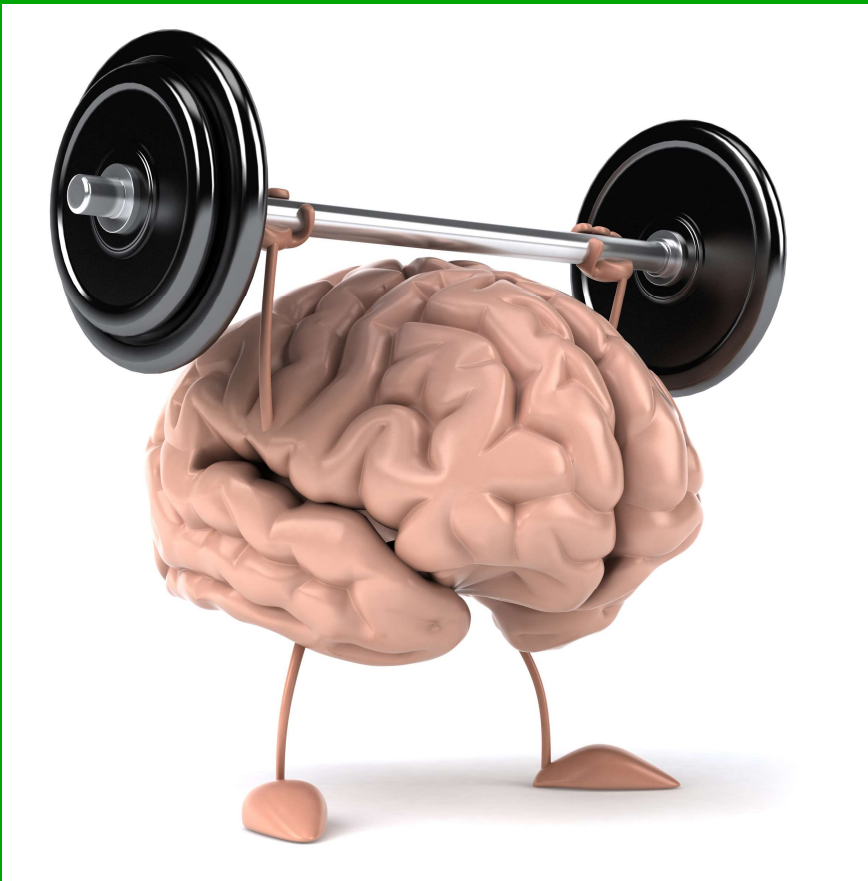
1

MANAGE

Your

■ Mindset

1. MANAGE Your Mindset



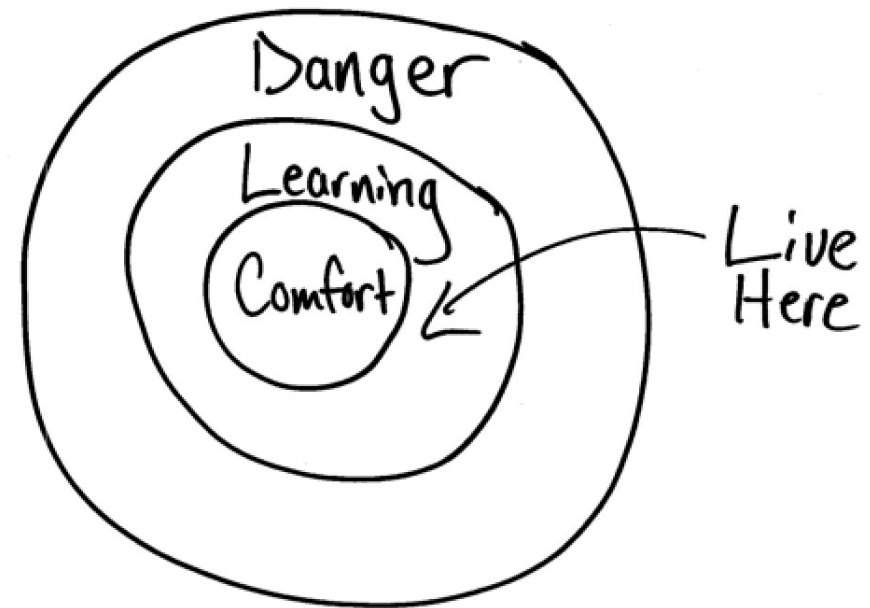
Intelligence is
not fixed &
ability can
always
improve with
effort & time.

1. MANAGE Your Mindset

You are *NOT* responsible for having a Chimp ... **but you ARE** responsible for managing it.

The Chimp can be seen as **the primitive system in the brain which you do not control.**





2

SPACE

Your

■ Practice

2. SPACE Your Practice

“Implementing a schedule of practice that spreads out study activities over time”



The proven single **best** strategy to ensure success.

3



TRAIN

Your

Learning

3. TRAIN Your Learning

BREAK SUBJECTS DOWN & SWITCH TOPICS OFTEN*

Learning is more powerful when done in a series of small chunks.

***a.k.a. Interleaving**

QUICK HIIT BLAST

1. BURPEES - 45 SEC.
REST 15 SEC
2. MOUNTAIN CLIMBERS - 45 SEC.
REST 15 SEC
3. JUMP SQUATS - 45 SEC.
REST 15 SEC
4. PUSH UPS - 45 SEC.
REST 15 SEC
5. LUNGES - 45 SEC.
REST 15 SEC
6. HIGH KNEES - 45 SEC.
REST 15 SEC
7. PLANK - 45 SEC.
REST 2 MINUTES

REPEAT 3X OR 4X
DEPENDENT ON YOUR LEVEL OF FITNESS.

Think HIIT – different exercises working lots of different muscles in a series

Find a ratio that works for you: e.g. 25 mins x 4 (5 mins rest in between)



THE POMODORO TECHNIQUE[®]

A SIMPLE METHOD TO BALANCE FOCUS WITH DELIBERATE BREAKS



1 PLAN YOUR TASKS
How many pomodoros might you need?

2 DO 1 POMODORO
Time for 25 mins then take a 5 min break

NO SNEAKY
WORKING!

PROTECT
YOUR POMODORO!



3 REPEAT x 4 POMODOROS
Then take a longer break



CONCEIVED BY FRANCESCO CIRILLO

sketchplanations

apps to try

<https://pomodor.app/timer>

<https://www.marinaratimer.com/>

<https://www.forestapp.cc/>

4.

KNOW

Yourself****

KNOWLEDGE AUDITS

- a check on how well you know a subject / topic.

1) Locate a list of topics (using a subject **scheme of work / textbook contents page**)

2) Rank every topic.
e.g. out of 4 (with "1" indicating **high** confidence and "4" indicating **low** confidence).

3) Revise accordingly. **Recheck when necessary.**

4. Know Yourself



I AM HERE

Activity: Conduct a Knowledge Audit

5



REPEAT to
Remember
Remember
to REPEAT

5. Repeat to remember / Remember to repeat

It takes 4 or 5 times of reviewing to move things from your short-term to long-term memory.

Build this in to your revision programme.



Activity: Create a Revision Planner

6

Always

be

■ PRACTISING

6. Always be PRACTISING

“**Practice Testing***: repeated self-testing or taking practice tests on to-be-learned material”

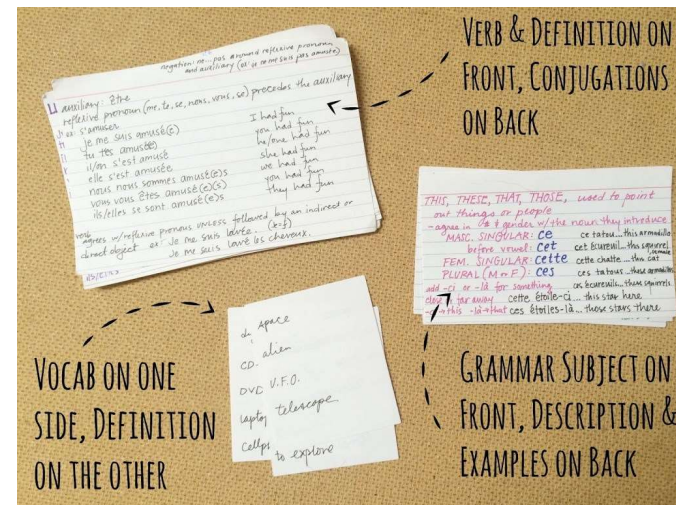
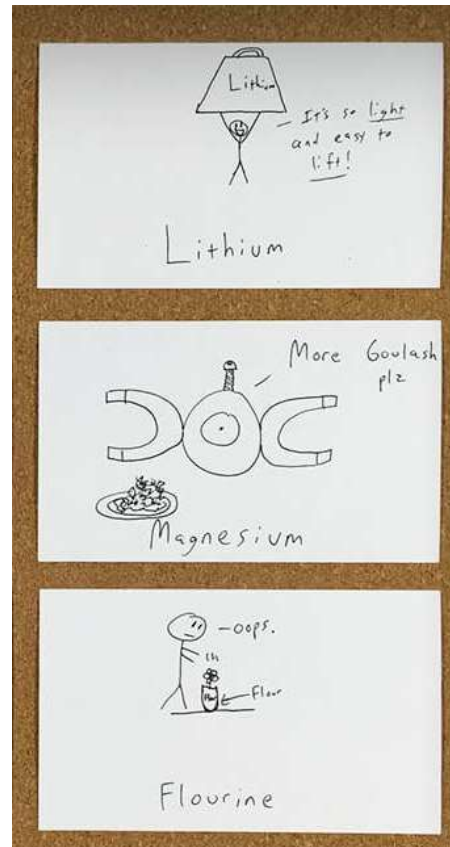
You can practise & test your learning in MANY WAYS and at MANY TIMES. What will you do?

Alongside **spaced practice**, **practice testing** is the most effective of all revision strategies to ensure best results.

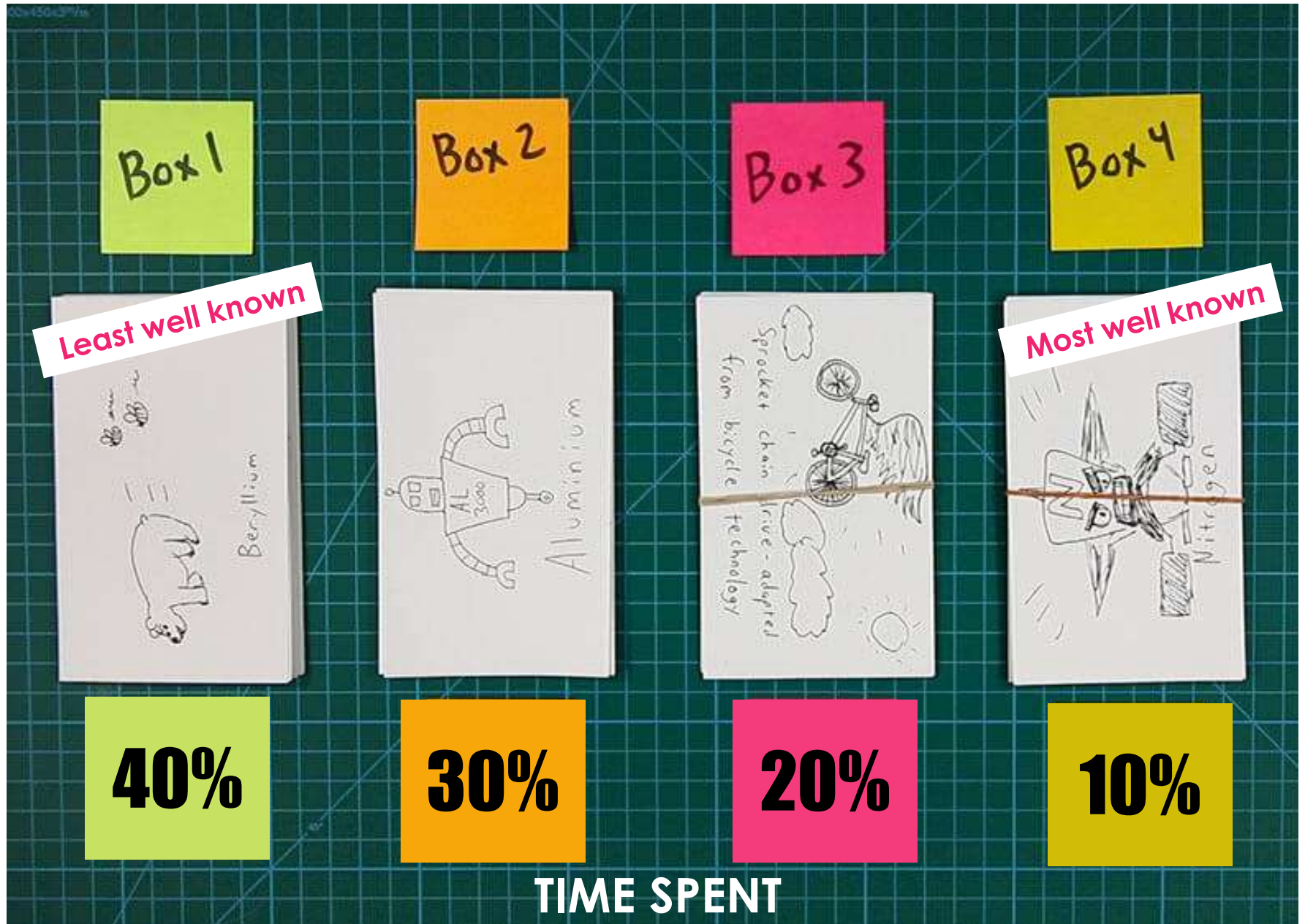


Flash Cards

1. Make Your Own Flash Cards
2. Mix Pictures and Words
3. Use Mnemonic Devices to Create Mental Connections
4. Break Complex Concepts into Multiple Questions
5. Say Your Answers Out Loud When Studying
6. Study Your Flash Cards in Both Directions

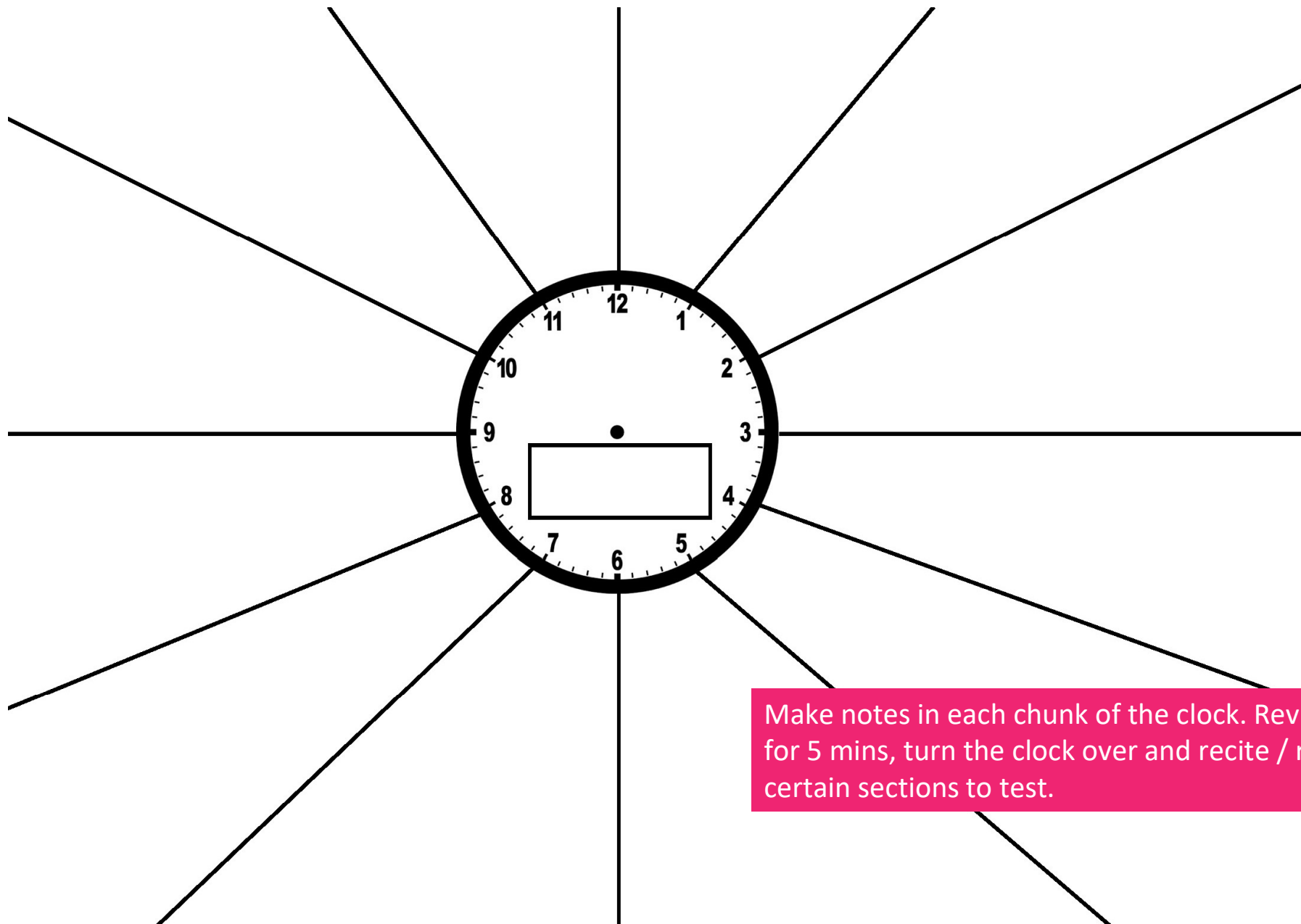


ACTIVITY: The Leitner Box



TIME SPENT

ACTIVITY: Revision Clock



Make notes in each chunk of the clock. Revise each slot for 5 mins, turn the clock over and recite / rewrite certain sections to test.

IND ENGINEERING - Expensive, but reliable eg. dams
OFT ENGINEERING - cheap, env. friendly eg. Afforestation

CASE STUDY OF FLOOD MANAGEMENT:
3 DAMS - CHINA
 Along the Yangtze river between Shanghai and Guangzhou
 why was it needed?
 reduce flooding from 1m to 1m 100yr

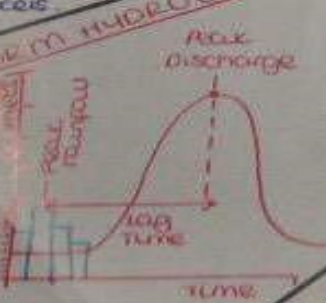
FLOODING CASE STUDIES:
IMPACTS - Social - 878 religious monuments
 66% of main city flooded
 250,000 people will have to move
 Economic - multi-purpose produces HEP, same power as 18 nuclear power stations (14% of China's power)
 Environmental - 100 river dolphins left in the area
 60,000 hectares of farmland destroyed

FLOODING CASE STUDIES: LECC - BANGLADESH
 70% of Bangladesh is less than 1m above sea level.
 Snowmelt in the Himalayas
 Deforestation in Nepal
 37% of land killed
 2.5 million homeless
 Effect on farming industry - affect food supply
Responses - houses on stilts - 17 million destroyed
 International Aid
 relief by UN + NGOs
 roads around flood
 difficult

FLOODING CASE STUDIES: MECC - TENNESBURY

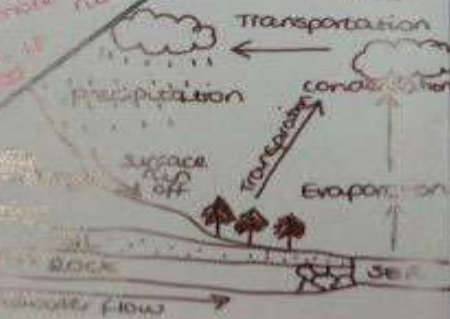
GLoucestershire - July 2007
causes - High rainfall, river Severn burst its banks.
 Tewkesbury at confluence of Severn and Avon
 development on the floodplain
effects - 3 people died, 350,000 lost access to running water
 water treatment works closed, motorists stranded on nearby motorway (M5)
 debate on future of building on floodplain
responses - RAF rescue helicopters sent to rescue people, flood relief fund set up to raise money for affected islands, Red Cross sent food parcels

HYDROGRAPH
 Rainfall
 Max discharge
 lag time
 time



FACTORS AFFECTING DISCHARGE
 • **RELIEF** - steeper the land = more surface runoff
 • **IMPERMEABLE ROCK** - water cannot infiltrate = more surface runoff
 • **DEForestation** - if trees are removed, less water is intercepted, more water reaches the ground

RIVER HYDROLOGICAL CYCLE



WATER MANAGEMENT
 Surplus - area with too much
 Deficit - area with not enough

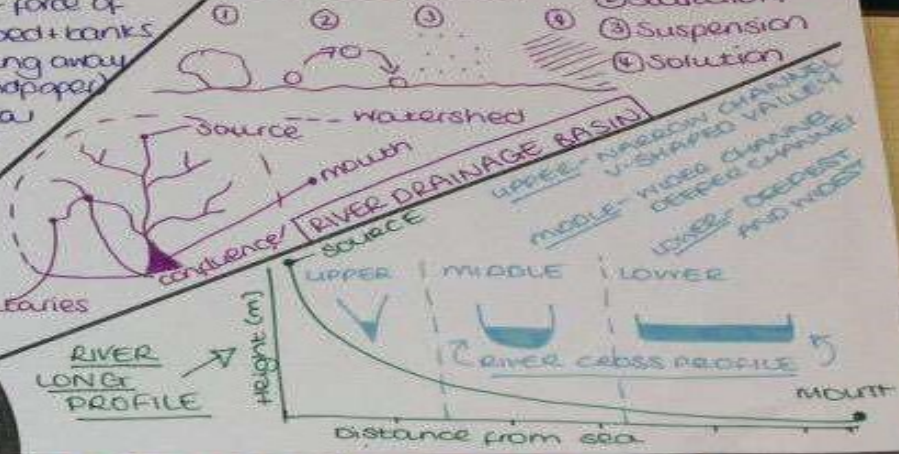
CASE STUDY OF A WATER TRANSFER SCHEME
LAKE VYRNWY + DAM
 water surplus - Wales
 deficit - Liverpool
 Pipeline built by 1989

ISSUES
 (S) new village had to be built
 (E) loss of farmland + wetlands
 (En) loss of wildlife

EROSION
 Hydraulic Action - force of water against bed + banks
 Abrasion - wearing away of material (sandpaper)
 Attrition - material collides + breaks into smaller pieces
 Solution - acids in water will dissolve material

TRANSPORTATION

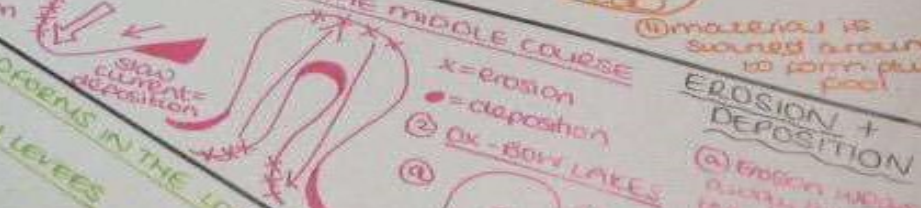
- 1) Traction
- 2) Saltation
- 3) Suspension
- 4) Solution



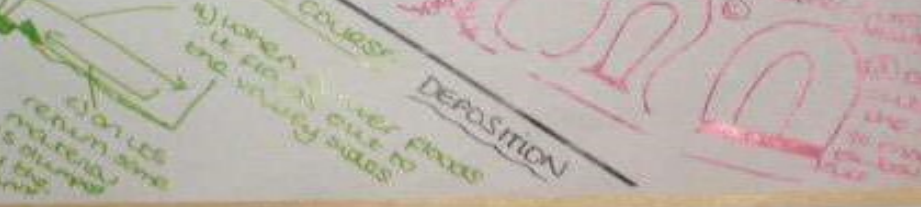
RIVER LANDFORMS IN THE UPPER COURSE



RIVER LANDFORMS IN THE MIDDLE COURSE



RIVER LANDFORMS IN THE LOWER COURSE



EROSION + DEPOSITION
 (a) erosion happens during the neck of the meander
 (b) river



ACTIVITY: Whiteboard Jumble

Solve for m .

$$\frac{6}{m} = \frac{-2}{m-8}$$

TRICKY
QUESTIONS
POST-IT
COLLECTION

[Practise fast /
slow answers here.
Then do the next
post-it]

ACTIVITY: The Blank Page

Put away class materials and write or sketch everything you know about a topic.

Be as thorough as possible.

Then, check your class materials for accuracy and important points you missed.



7

OPTIMISATION



7. Optimisation

Thinking about how
your revision is working
(every session / day /
week)
and how it can be
improved
will **optimise** your
performance.

How will you do this?



I HAVE

~~EXCUSES~~

RESULTS



ACTIVITY: The Blank Page

Put away class materials and write or sketch everything you know about a topic.

Be as thorough as possible.

Then, check your class materials for accuracy and important points you missed.

Retrieval Practice: bringing information to mind from memory (not using the crutch of class notes or text books).



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.



6 from the Learning Scientists

<https://www.learningscientists.org/videos>

ELABORATION

EXPLAIN AND DESCRIBE IDEAS WITH MANY DETAILS (UNAIDED)

Ask & answer questions about how and why things happen.

COASTS: How does a beach form? What do waves do to a coast? Why do coastal areas encourage tourism? How can this be a problem?

Make connections between different ideas to explain how they work together. Take two ideas and think of ways they are similar and different.

How is diffusion similar / different to osmosis?

How are the causes of WW1 similar / different to those of WW2?

Describe how ideas apply to your own experiences.

Our family visit coastal areas because...

My fingers & toes wrinkle after swimming for a long time because...

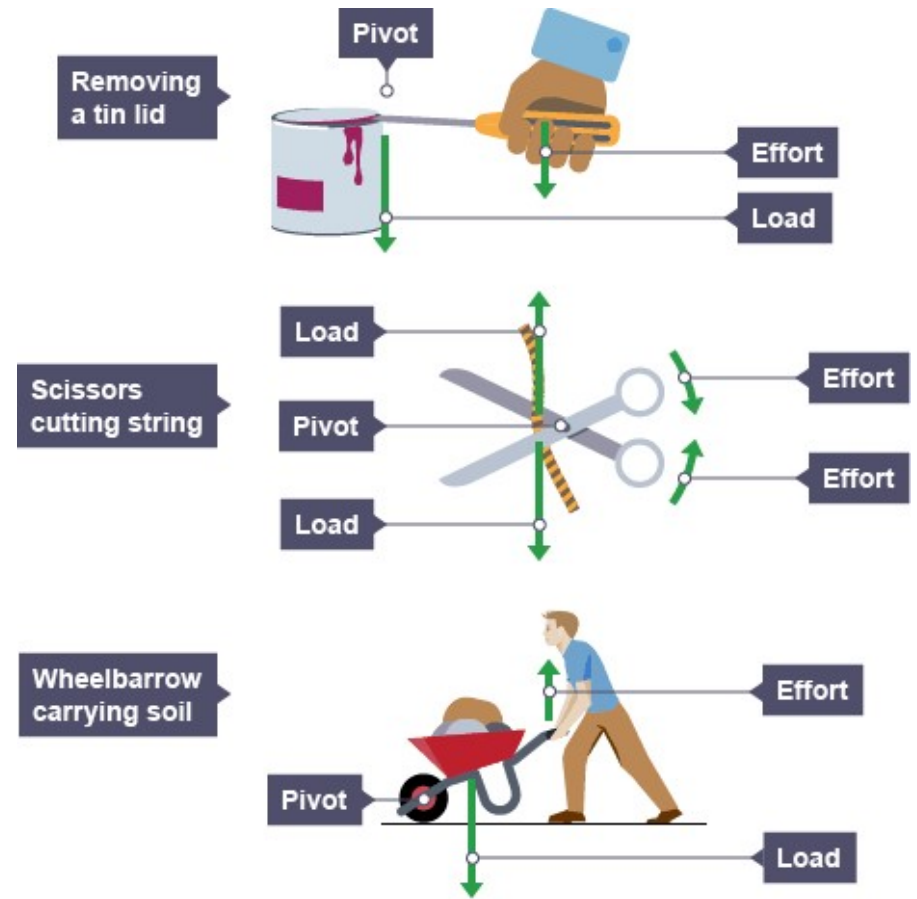


CONCRETE EXAMPLES

USE SPECIFIC EXAMPLES TO UNDERSTAND ABSTRACT IDEAS

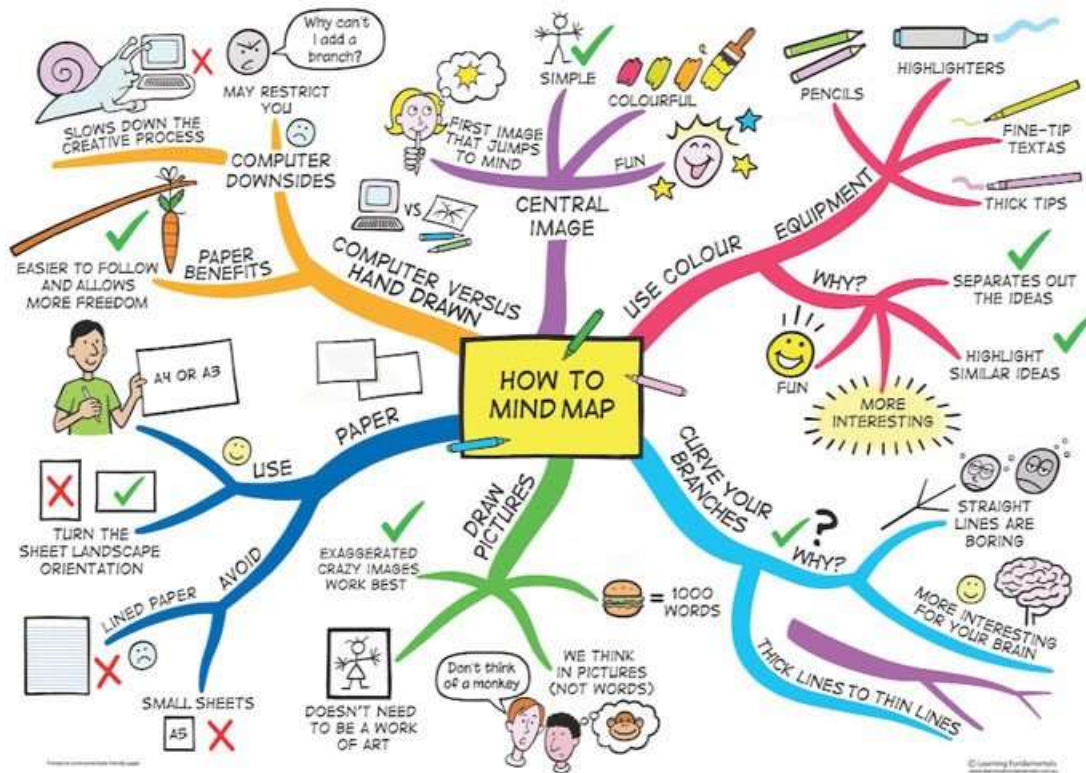
Collect as many examples as you can from books, folders, those your teacher has used.

Share with friends, and explain them to each other for added benefits.





ACTIVITY: Graphic Organisers



Dual-Coding: combining verbal and non-verbal elements to facilitate understanding and enhance recall.

Comparison table of similarities and differences.

Flow chart to summarise a process or series of events.

How about...?

A **castle** with separate turrets & a strong foundation.
Streams growing into a **river** & then a **lake**.
 A **village** with a central square & streets around it.

Your Revision Programme

KEY QUESTIONS to decide:

- 1) What will the day look like?
- 2) How will you balance revision / sleep / diet / exercise?
- 3) How will you fit in **regular repetition**?
- 4) How will you add in **regular testing**?
- 5) How will you ensure **regular reflection**?
- 6) How will you **manage your mindset**?
- 7) What won't you do?

THE DAY BEFORE

Check you know the time and place for your exam.

Make sure you know how many questions you need to answer and how long you are planning to spend on each part of the paper.

Make sure you have pens, cartridges, highlighters and any other equipment you need.

Read through your notes but don't work too late.

Get some fresh air. Don't stay inside all day.



THE NIGHT BEFORE

Last minute cramming increases anxiety and tires you out.

Go to bed at a sensible hour.

If you can't sleep, don't worry - your body is still resting.



ON THE DAY

Get up in plenty of time.

Eat breakfast, even if you are not hungry. Research shows students who eat breakfast perform better in exams.

Check you have all your equipment.

Don't be put off by other students who are panicking.

Stay hydrated. Drink plenty of water to aid concentration.

IN THE EXAM

Read the instructions carefully.

Make sure you read to the end of the paper and turn over every page in the booklet - including blank pages.

Put your watch on the table and keep an eye on the time.

Spend time reading the questions carefully. Underline key words. Plan your answers.

If your mind goes blank, breathe! Look away from the paper and try to visualise your classroom for that subject, your notes and key words from that topic.

If you feel anxious, breathe in to the count of 7 and out to the count of 11.

If you do run out of time, jot down some bullet points. You may pick up some extra marks.