



REVISION @ PILTON YEARS 7,8 & 9

REVISION AT PILTON

1

Summarise



[Create a revision Timetable](#)



Organise your stationery and work area



[Revision Clocks](#)



[Create Flash Cards](#)



[Creating a Mind Map](#)



[Create revision Notes using the Cornell Method](#)



Dual coding: combine written text with diagrams, sketches or visual aids in your mind maps, clocks, notes and flash cards



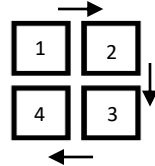
Save your resources in folders by subjects

2

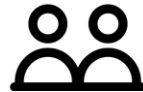
Revise



Re create your mind map or revision clock from memory: If stuck re-look at the mind-map or clock and redo in a different colour. Start with a small section then move to the whole thing



Retrieval Relay Race: Write as much as you can about a topic in box 1, read your notes for 5 mins, add further info on the topic in box 2. Repeat for box 3 and 4.



Have a friend or family member test you with your flash cards



Create a Question and answers sheet. Cover the answers and write out your answer again. Cover the question and rewrite the question from the answer



BLURT out all that you know on a topic in a set time – 10mins max. Then refer to your revision guide and add to them with a different colour pen. Any areas in a different colour need revision guides and a mind map

3

Test Yourself

Completing practice questions is the best way to consolidate knowledge and identify your gaps

In some subjects (notably maths and science), getting practice in answering exam questions is essential for securing success



Speak to your teacher. They will be able to recommend (and even provide) good sample questions.



Don't attempt these questions without having revised the topic first. You will feel worried and this does not help.



Complete the questions under timed conditions. General rule is 1 mark = 1 minute. Do this for 15 minutes – 20 minutes



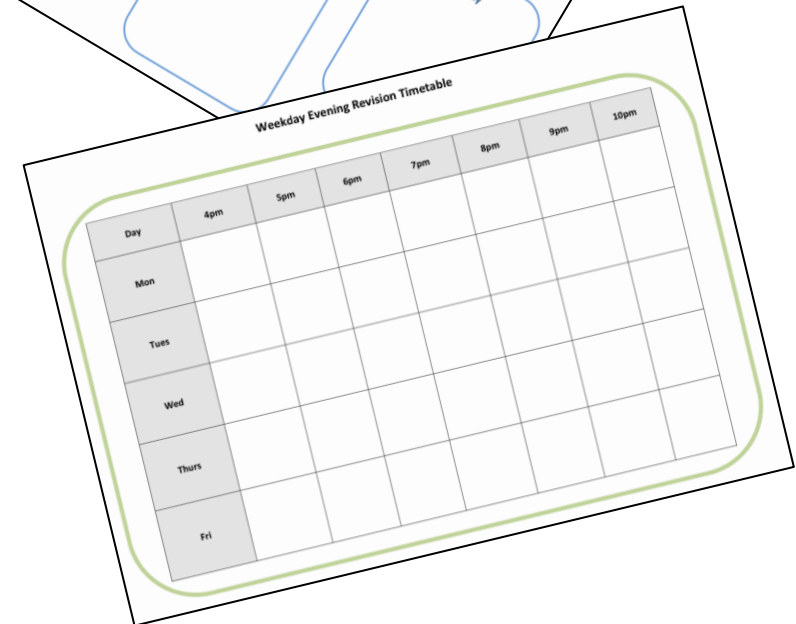
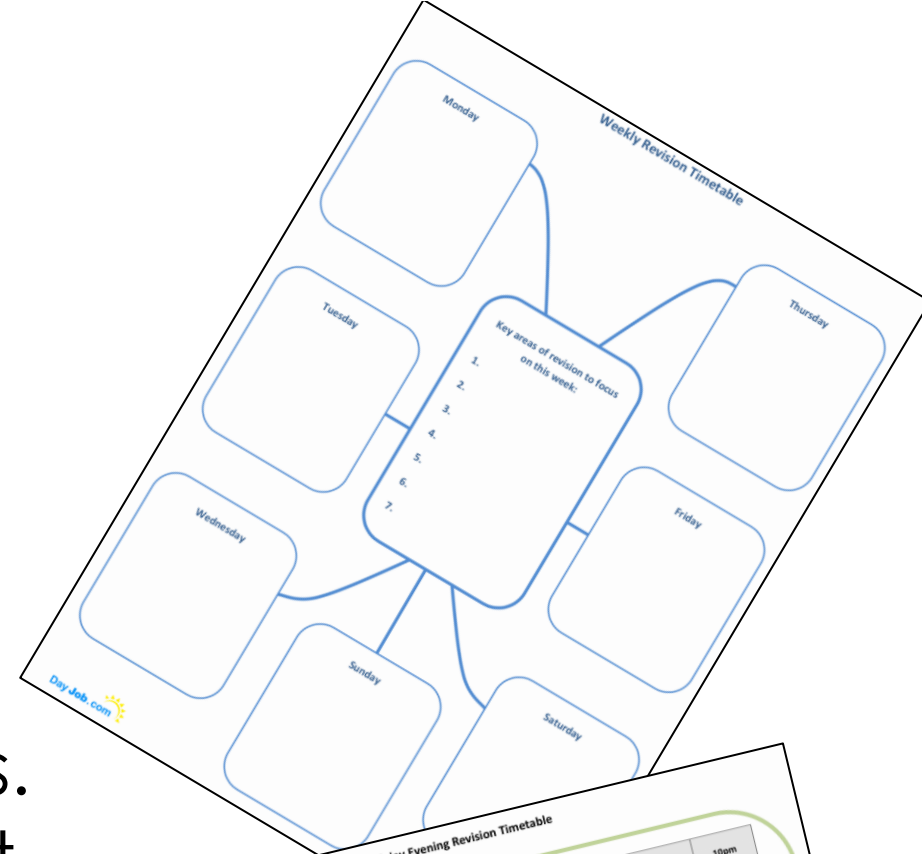
Those questions you have not answered well need to be revised in the remaining session time



After revising go back to the questions and redo in a different colour

CREATING A REVISION TIMETABLE

- Plan to do four 30 minute revision sessions per day.
- Download one of the templates from our website.
- Sessions should be separated by breaks.
- List your subjects from easiest to hardest.
- For each subject, list the topics you need to revise.
- Add one subject with a specific topic to each of the revision sessions slots.

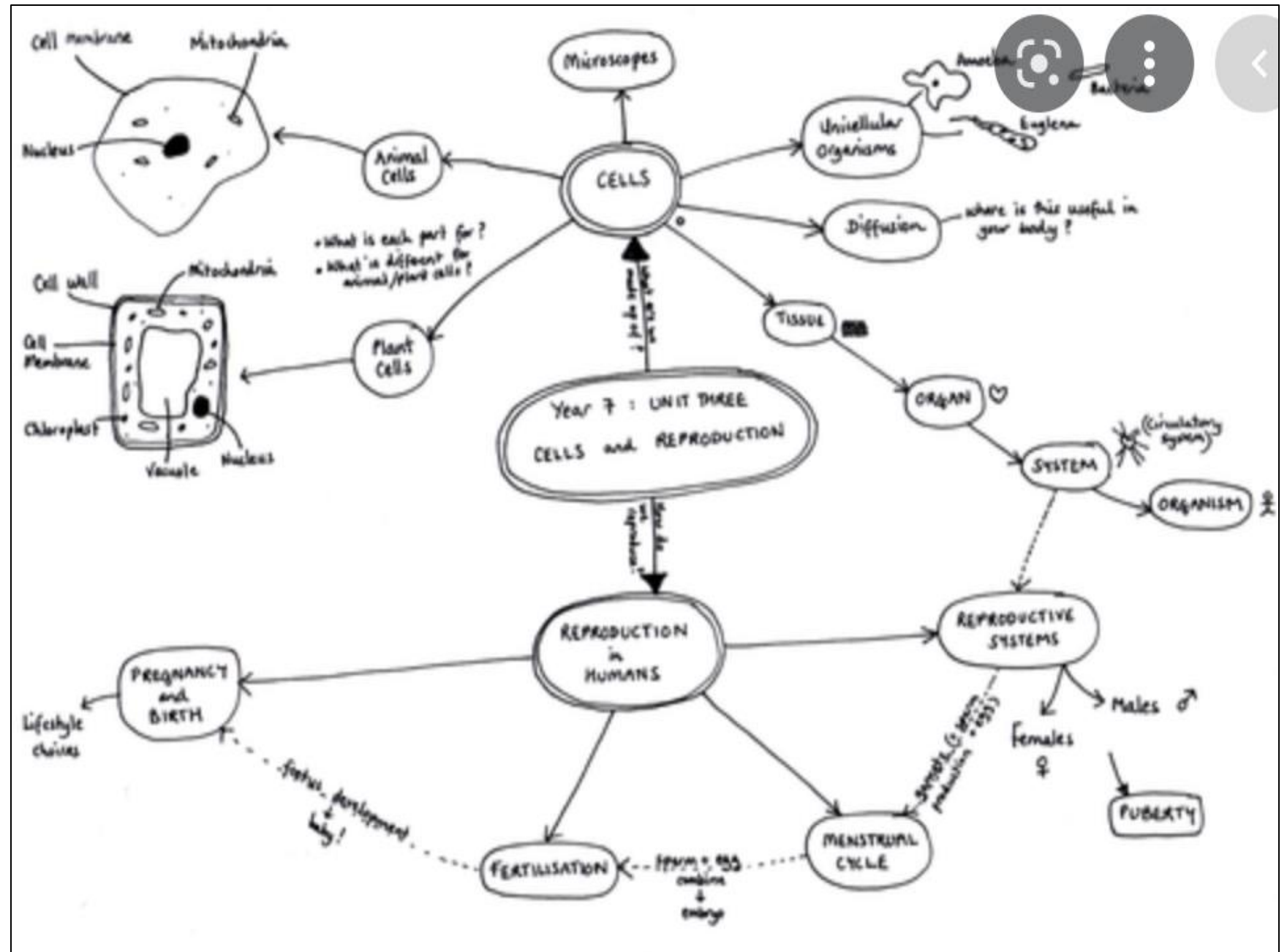


1

SUMMARISE

- The actual process of condensing notes into bullet points and/or pictures helps you to remember more information as you have to think hard about how to reduce the information.
- Creating resources for **active recall**
- Spend 1/3 of your time only
- Use this time to create
 - Mind maps
 - Revision clocks
 - Flash cards
 - Cornell notes

MIND MAPS



REVISION CLOCKS



FLASH CARDS

What are the 2 biological
methods of extracting
metals?

From low grade ores or waste produced
when metals extracted.

CORNELL NOTES

the mole

2.1.3
2.1.1

09/18

- Define the 'amount of substance'.
- What is Avogadro's constant?



- What is 'molar mass'?
- State the equation involving amount of substance + mass.
- Define molar gas volume
- State the equation involving molar gas volume at RTP
- What is the molecular formula?
- What is the empirical formula?

- What is water of crystallisation?
- What does 'anhydrous' mean?

amount of substance
counts the number of particles in a substance. (n)

→ measured in moles (mol)

the amount of any substance with the same amount of atoms that are in 12g of carbon-12.

MOLAR MASS

→ the mass per mole of a substance.
(g mol⁻¹)

the volume per mole of gas molecules at a stated temp + P.

at the same temp + P, equal volumes of different gases contain the same number of molecules

Formulae

MOLECULAR
The number of atoms of each element in a molecule

Relative Molecular Mass (M_r)
→ compares mass of molecule to mass of C-12 atom

Relative Formula Mass
→ mass of a formula unit compared to mass of C-12 atom

avogadro's constant
is the number of atoms per mole of carbon-12.

6.02×10^{23} particles

moles = $\frac{\text{mass}}{\text{molar mass}}$

molar GAS volume

At RTP, the molar gas volume is 24.0 dm³ mol⁻¹

moles = $\frac{\text{volume}}{\text{molar gas volume}}$

EMPIRICAL

The simplest whole no. ratio of atoms of each element in a compound

hydrated salts
water & H₂O molecules are part of crystalline structure

anhydrous = CuSO₄ → different colours

heat to drive off water.

Summary:

- Amount of substance = no. of atoms in 12g C-12 (mol)
- Avogadro's constant = 6.02×10^{23} particles
- Molar mass = mass per mole of a substance
- moles = mass ÷ molar mass
- Molar gas volume = volume / mole of a gas (depends on T, P)
- At RTP, V_m = 24 dm³ mol⁻¹
- moles = volume ÷ molar gas volume
- Empirical → ratio; molecular → no. of atoms
- Water of crystallisation: H₂O molecules in salt's structure

FLASH CARDS



REVISION CLOCKS

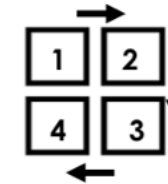
REVISE (RECALL)

- Embeds knowledge into your long term memory.
- Retrieving information from memory through testing yourself at every stage not only strengthens our ability to retain information but also improves connections in our brains between different concepts.
- Active recall is more difficult and mentally more taxing than re-reading. But the key point is, ***revision should be cognitively demanding!***

REVISE



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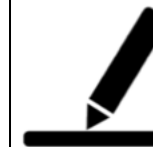
Retrieval Relay Race: Write as much as you can about a topic in box 1, read your notes for five minutes, add further info on the topic in box 2. Repeat for box 3 and 4.



Have a friend or family member test you with your flash cards



Create a Question and Answer sheet. Cover the answers and write out your answer again. Cover the question and rewrite the question from the answer



BLURT out and write down all that you know on a topic in a set time (10 minutes max.), then refer to your revision guide and add anything you forgot in a different colour. Any areas in a different colour need revision guides and a mind map.

2

REVISE (RECALL)

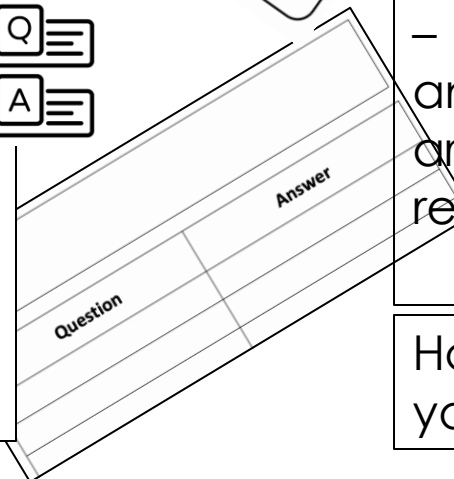


This is the process to embed the knowledge into your long term memory. This is a critical part of the revision process.

Re-create your revision clock from memory: Take two colours of pen. Spend five minutes completing each segment of your clock from memory. Check your notes and take your second pen. Add in additional notes you missed first time around. Combine with dual coding ideas.

Retrieval Relay Race: Write as much as you can about a topic in box 1, read your notes for five minutes, add further info on the topic in box 2. Repeat for boxes 3 and 4.

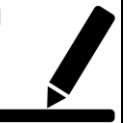
Question and Answers: Create a series of questions and answers. Cover the answers and write out your answer again. Cover the question and rewrite the question from the answer



Re create your mind map from memory: You have 3 lives to recreate your mind map from memory. Each time your are stuck you can refer back to your mind map but you loose a life. After 3 lives you need to start the mind-map from the beginning. There is a video on the website modelling this technique.



BLURT out all that you know on a topic in a set time – 10mins max. Then refer to your revision guide and add to them with a different colour pen. Any areas in a different colour need further revision resources created.



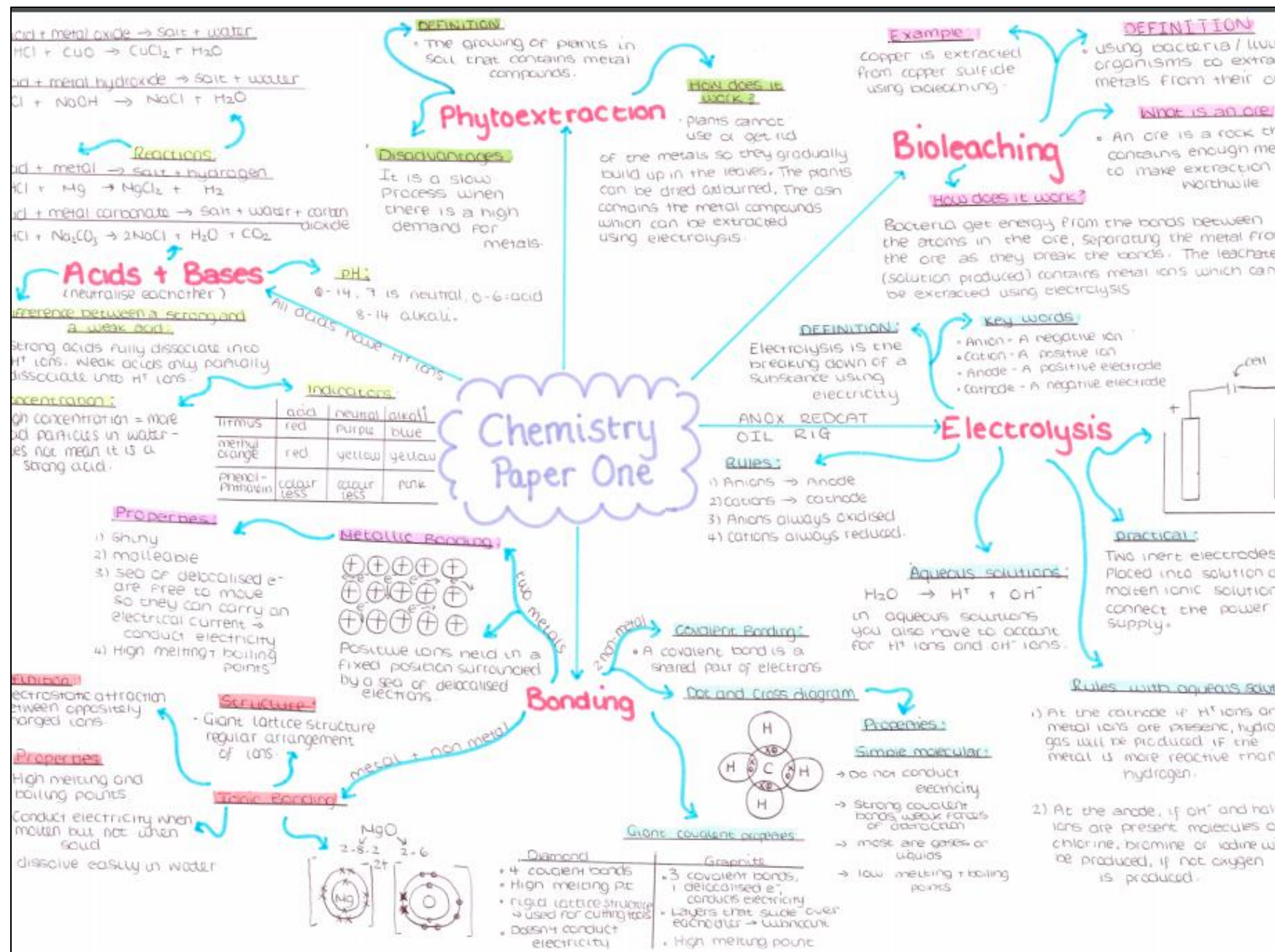
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MIND MAPS

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FLASH CARDS

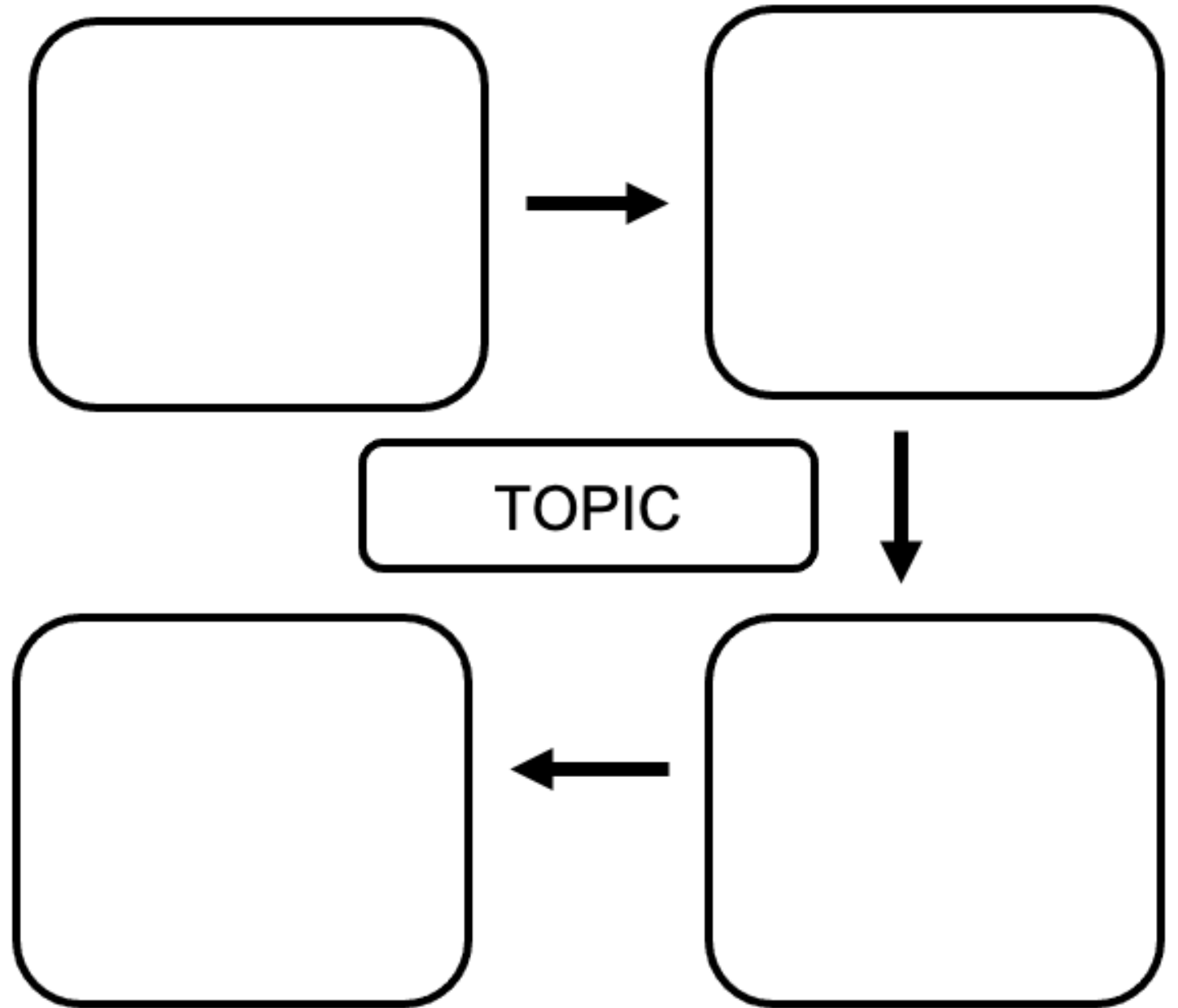
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What are the 2 biological methods of extracting metals?

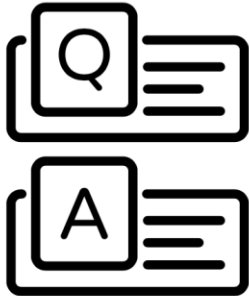
From low grade ores or waste produced when metals extracted.

RETRIEVAL RELAY RACE

Write as much as you can about a topic in box 1, read your notes for five minutes, add further information on the topic in box 2. Repeat for boxes 3 and 4.



QUESTIONS AND ANSWERS



TOPIC:	
Question	Answer

Questions and Answers:

Create a series of questions and answers. Cover the answers and write out your answer again. Cover the question and rewrite the question from the answer.

TEST YOURSELF YEARS 7, 8 & 9

- Reduce anxiety by demystifying the whole thing.
- It's the best preparation.
- Apply your knowledge.
- Work on your time management :
1 mark = 1 minute
- **ANALYSE** – do something with the information.
- Highlights the gaps in your knowledge: Revise, re-test etc.
- Teachers will provide questions in lessons, end of unit tests, past assessments, online SENECA, BITESIZE, school programmes, revision guides, text books

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