Revision!

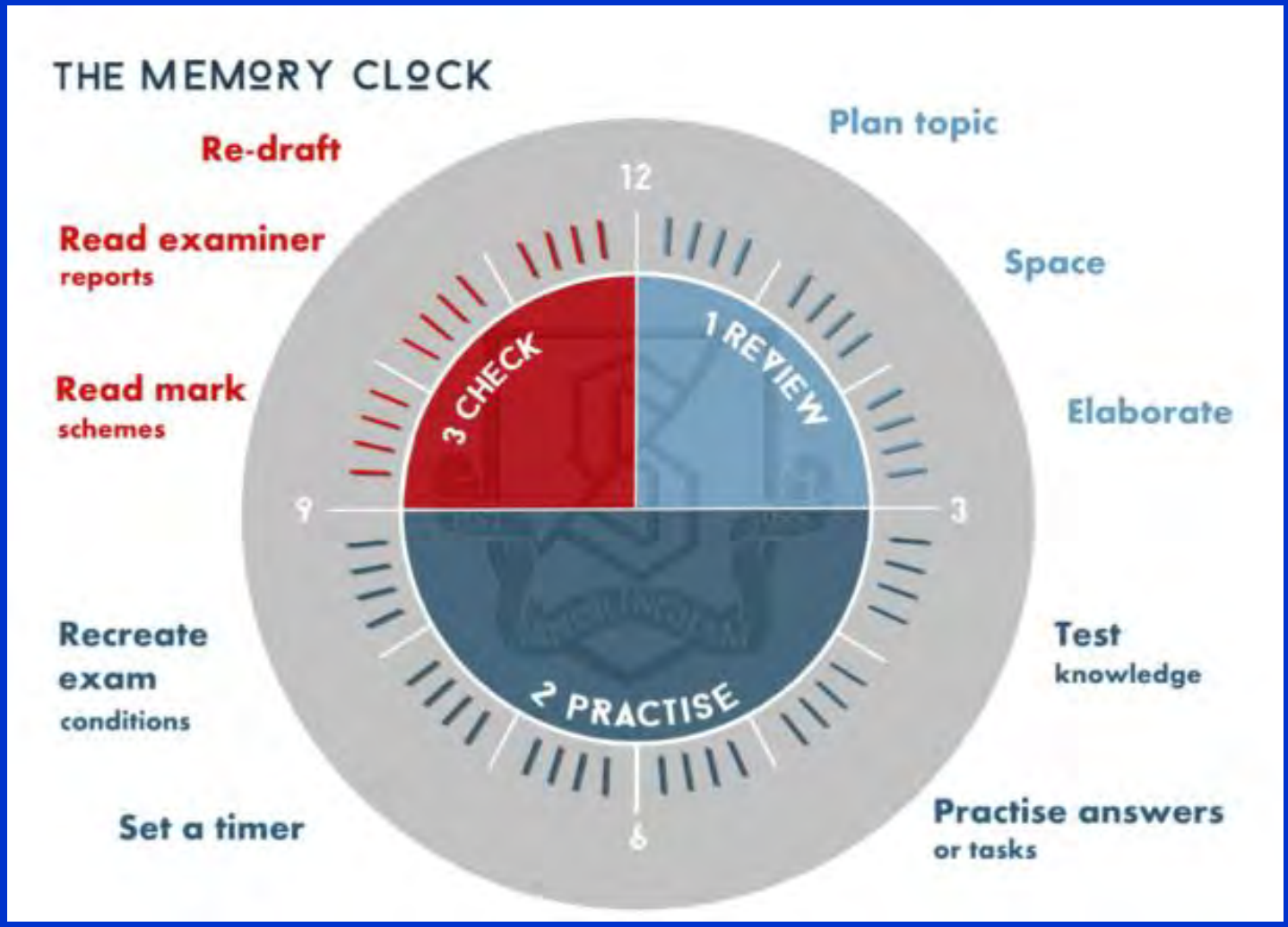
What a nightmare...

Revision is hard but…

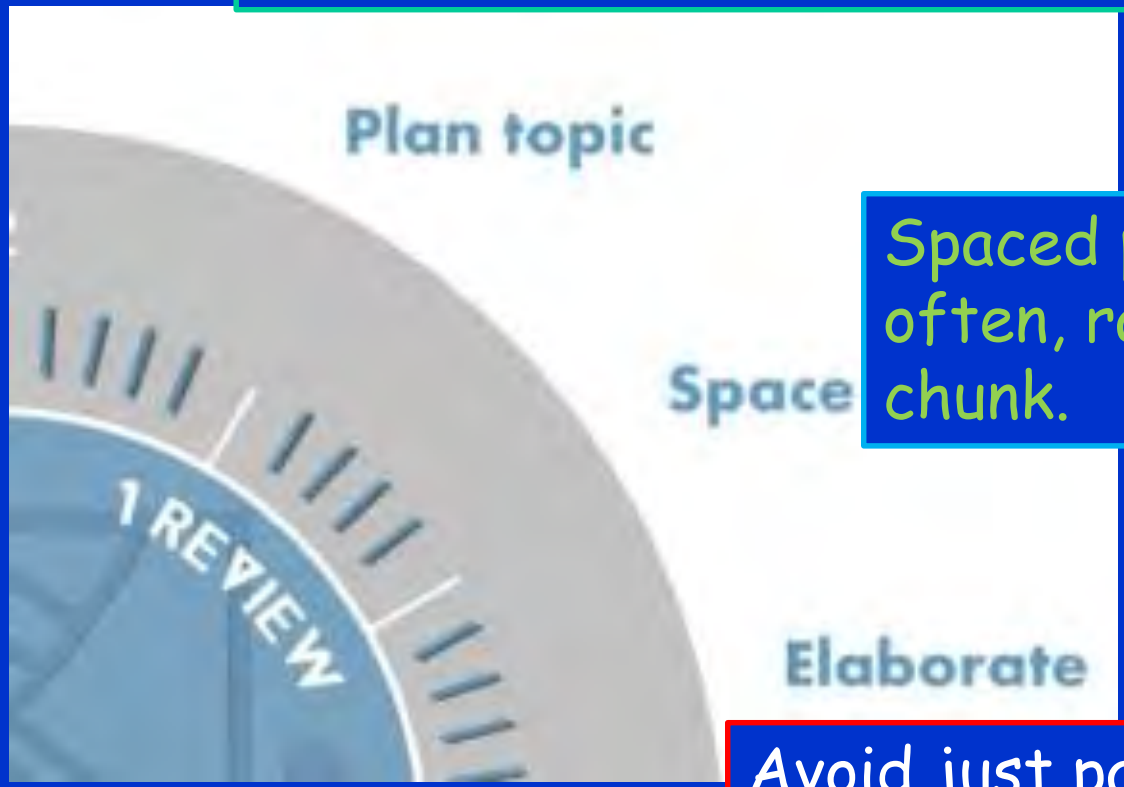
"Nothing easy
is worthwhile…
Nothing
worthwhile is easy"

Effective Revision

The memory clock



Which part of the topic will you revise?
Use Your PPE results – where did you struggle?
Use your PLC's for each subject.
Where are your RED areas – focus upon these.



Spaced practice – little and often, rather than in one big chunk.

Avoid just passively reading or highlighting sections.
Avoid just making notes.
Use purposeful revision techniques.

Paper 1 Hazards Raw	Paper 1 Hazards %	Paper 1 Living World Raw	Paper 1 Living World %	Paper 1 Coasts Landscapes R	Paper 1 Coast Landscapes %	Paper 1 River Landscapes Ra	Paper 1 River Landscapes %	Paper 1 Total	Paper 1 Total %	Paper 1 PPE 1	Paper 2 Urban Raw	Paper 2 Urban %	Paper 2 Economic Change	Paper 2 Economic Change %	Paper 2 Resources Raw	Paper 2 Resources %	Paper 2 Energy Raw	Paper 2 Energy %	Paper 3 Unfamiliar Fieldwork	Paper 3 UnfamiliarFieldwork %	Paper 3 Familiar Fieldwork Ra	Paper 3 Familiar Fieldwork %	Paper 2/3 Total	Paper 2/3 Total %	Paper 2/3 PPE 1	Overall Total Raw	Overall Total %	PPE 1 Total %		Grade +5%	Grade +10%
26	79%	18	72%	9	60%	9	60%	62	70%	45%	24	73%	##	84%	#	86%	8	73%	11	69%	15	65%	86.00	74%	52%	148.00	73%	49%			

Unit 1b The Living World

GEOGRAPHY DEPARTMENT

AQA

What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.

Ecosystem's Components

Abiotic	These are **non-living**, such as air, water, heat and rock.
Biotic	These are **living**, such as plants, insects, and animals.
Flora	**Plant life** occurring in a particular region or time.
Fauna	**Animal life** of any particular region or time.

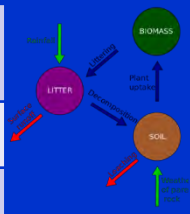
Food Web and Chains

Simple **food chains** are useful in explaining the basic principles behind ecosystems. They show only one species at a particular trophic level. **Food webs** however consists of a network of many food chains interconnected together.

Nutrient cycle

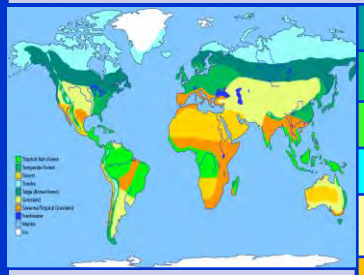
Plants take in **nutrients** to build into new organic matter. Nutrients are taken up when animals eat plants and then returned to the soil when animals die and the body is broken down by **decomposers**.

Litter	This is the **surface layer** of vegetation, which over time breaks down to become **humus**.
Biomass	The total **mass of living organisms** per unit area.



Biomes

A biome is a **large geographical area of distinctive plant and animal groups**, which are adapted to that particular environment. The climate and geography of a region determines what type of biome can exist in that region.



	Coniferous forest
	Deciduous forest
	Tropical rainforests
	Tundra
	Temperate grasslands
	Tropical grasslands
	Hot deserts.

The **most productive biomes** – which have the greatest biomass- grow in climates that are **hot and wet**.

Biome's climate and plants

Biome	Location	Temperature	Rainfall	Flora	Fauna
Tropical rainforest	Centred along the Equator.	Hot all year (25-30°C)	Very high (over 200mm/year)	Tall trees forming a canopy; wide variety of species.	Greatest range of different animal species. Most live in canopy layer
Tropical grasslands	Between latitudes 5°- 30° north & south of Equator.	Warm all year (20-30°C)	Wet + dry season (500-1500mm/year)	Grasslands with widely spaced trees.	Large hoofed herbivores and
Hot desert	Found along the tropics of Cancer and Capricorn.	Hot by day (over 30°C) Cold by night	Very low (below 300mm/year)	Lack of plants and few specie adapted to drought.	
Temperate forest	Between latitudes 40°-60° north of Equator.	Warm summers + mild winters (5-20°C)	Variable rainfall (500-1500m /year)	Mainly deciduous trees; a var species.	
Tundra	Far Latitudes of 65° north and south of Equator	Cold winter + cool summers (below 10°C)	Low rainfall (below 500mm/ year)	Small plants grow close to the ground and only in summer.	Low number of species. Most animals found along coast.
Coral Reefs	Found within 30° north – south of Equator in tropical waters.	Warm water all year round with temperatures of 18°C	Wet + dry seasons. Rainfall varies greatly due to location.	Small range of plant life which includes algae and sea grasses that shelters reef animals.	Dominated by polyps and a diverse range of fish species.

Tropical Rainforest Biome

Tropical rainforest cover about **2 per cent** of the Earth's surface yet they are home to **over half of the world's plant and animals**.

Interdependence in the rainforest

A rainforest works through **interdependence**. This is where the plants and animals **depend on each other** for survival. If one component changes, there can be **serious knock-up effects** for the entire ecosystem.

Distribution of Tropical Rainforests

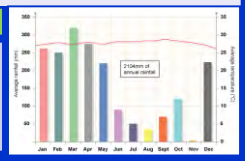
Tropical rainforests are **centred along the Equator** between the Tropic of Cancer and Capricorn. Rainforests can be found in South America, central Africa and South-East Asia. **The Amazon** is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.

Rainforest nutrient cycle

The **hot, damp conditions** on the forest floor allow for the **rapid decomposition** of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots. However, as these nutrients are in high demand from the many fast-growing plants, they do not remain in the soil for long and stay close to the surface. If vegetation is removed, the soils quickly become **infertile**.

Climate of Tropical Rainforests

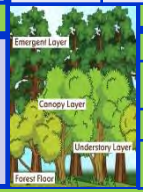
- Evening temperatures rarely fall below **22°C.**
- Due to the **presence of clouds**, temperatures rarely rise above **32°C**.
- Most afternoons have heavy showers.
- At night with no clouds insulating, temperature drops.



CASE STUDY: UK Ecosystem: Epping Forest, Essex

This is a typical English lowland deciduous woodland. **70% of the area** is designated as a **Site of Special Scientific Interest (SSI)** for its biological interest, with **66 %** designated as a **Special Area of Conservation (SAC).**

Components & Interrelationships		Management
Spring	**Flowering plants** (producers) such as bluebells store nutrients to be eaten by consumers later.	- Epping has been managed for centuries. - Currently now used for **recreation** and **conservation**. - Visitors **pick fruit** and berries, helping to **disperse seeds**. - Trees cut down to encourage **new growth for timber.**
Summer	Broad tree leaves grow quickly to **maximise photosynthesis**.	
Autumn	Trees shed leaves to **conserve energy** due to sunlight hours decreasing.	
Winter	Bacteria **decompose** the leaf litter, releasing the nutrients into the soil.	



Layers of the Rainforest

Emergent	Highest layer with trees reaching **50 metres.**
Canopy	Most life is found here as It receives **70% of the sunlight** and **80% of the life.**
U-Canopy	Consists of trees that reach **20 metres high.**
Shrub Layer	Lowest layer with **small trees** that have adapted to living in the **shade.**

Unit 1b

The Living World

GEOGRAPHY DEPARTMENT

AQA

What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.

Ecosystem's Components

Abiotic	These are **non-living**, such as air, water, heat and rock.
Biotic	These are **living**, such as plants, insects, and animals.
Flora	**Plant life** occurring in a particular region or time.
Fauna	**Animal life** of any particular region or time.

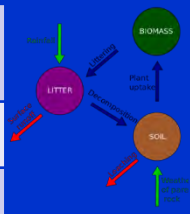
Food Web and Chains

Simple **food chains** are useful in explaining the basic principles behind ecosystems. They show only one species at a particular trophic level. **Food webs** however consists of a network of many food chains interconnected together.

Nutrient cycle

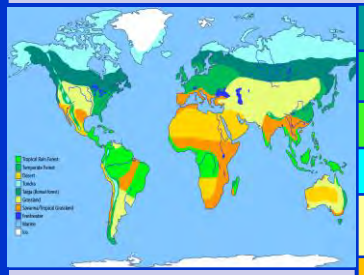
Plants take in **nutrients** to build into new organic matter. Nutrients are taken up when animals eat plants and then returned to the soil when animals die and the body is broken down by **decomposers**.

Litter	This is the **surface layer** of vegetation, which over time breaks down to become **humus**.
Biomass	The total **mass of living organisms** per unit area.



Biomes

A biome is a **large geographical area of distinctive plant and animal groups**, which are adapted to that particular environment. The climate and geography of a region determines what type of biome can exist in that region.



	Coniferous forest
	Deciduous forest
	Tropical rainforests
	Tundra
	Temperate grasslands
	Tropical grasslands
	Hot deserts.

The **most productive biomes** – which have the greatest biomass- grow in climates that are **hot and wet**.

Biome's climate and plants

Biome	Location	Temperature	Rainfall	Flora	Fauna
Tropical rainforest	Centred along the Equator.	Hot all year (25-30°C)	Very high (over 200mm/year)	Tall trees forming a canopy; wide variety of species.	Greatest range of different animal species. Most live in canopy layer
Tropical grasslands	Between latitudes 5°- 30° north & south of Equator.	Warm all year (20-30°C)	Wet + dry season (500-1500mm/year)	Grasslands with widely spaced trees.	Large hoofed herbivores and carnivores dominate.
Hot desert	Found along the tropics of Cancer and Capricorn.	Hot by day (over 30°C) Cold by night	Very low (below 300mm/year)	Lack of plants and few species; adapted to drought.	Many animals are small and nocturnal: except for the camel.
Temperate forest	Between latitudes 40°-60° north of Equator.	Warm summers + mild winters (5-20°C)	Variable rainfall (500-1500m /year)	Mainly deciduous trees; a variety of species.	Animals adapt to colder and warmer climates. Some migrate.
Tundra	Far Latitudes of 65° north and south of Equator	Cold winter + cool summers (below 10°C)	Low rainfall (below 500mm/ year)	Small plants grow close to the ground and only in summer.	Low number of species. Most animals found along coast.
Coral Reefs	Found within 30° north – south of Equator in tropical waters.	Warm water all year round with temperatures of 18°C	Wet + dry seasons. Rainfall varies greatly due to location.	Small range of plant life which includes algae and sea grasses that shelters reef animals.	Dominated by polyps and a diverse range of fish species.

Tropical Rainforest Biome

Tropical rainforest cover about **2 per cent** of the Earth's surface yet they are home to **over half of the world's plant and animals**.

Interdependence in the rainforest

A rainforest works through **interdependence**. This is where the plants and animals **depend on each other** for survival. If one component changes, there can be **serious knock-up effects** for the entire ecosystem.

Distribution of Tropical Rainforests

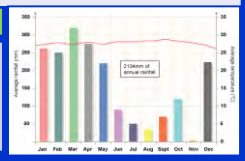
Tropical rainforests are **centred along the Equator** between the Tropic of Cancer and Capricorn. Rainforests can be found in South America, central Africa and South-East Asia. **The Amazon** is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.

Rainforest nutrient cycle

The **hot, damp conditions** on the forest floor allow for the **rapid decomposition** of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots. However, as these nutrients are in high demand from the many fast-growing plants, they do not remain in the soil for long and stay close to the surface. If vegetation is removed, the soils quickly become **infertile**.

Climate of Tropical Rainforests

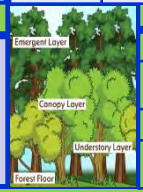
- Evening temperatures rarely fall below **22°C.**
- Due to the **presence of clouds**, temperatures rarely rise above **32°C**.
- Most afternoons have heavy showers.
- At night with no clouds insulating, temperature drops.



CASE STUDY: UK Ecosystem: Epping Forest, Essex

This is a typical English lowland deciduous woodland. **70% of the area** is designated as a **Site of Special Scientific Interest (SSI)** for its biological interest, with **66 %** designated as a **Special Area of Conservation (SAC).**

Components & Interrelationships		Management
Spring	**Flowering plants** (producers) such as bluebells store nutrients to be eaten by consumers later.	- Epping has been managed for centuries. - Currently now used for **recreation** and **conservation**. - Visitors **pick fruit** and berries, helping to **disperse seeds**. - Trees cut down to encourage **new growth for timber.**
Summer	Broad tree leaves grow quickly to **maximise photosynthesis**.	
Autumn	Trees shed leaves to **conserve energy** due to sunlight hours decreasing.	
Winter	Bacteria **decompose** the leaf litter, releasing the nutrients into the soil.	



Layers of the Rainforest

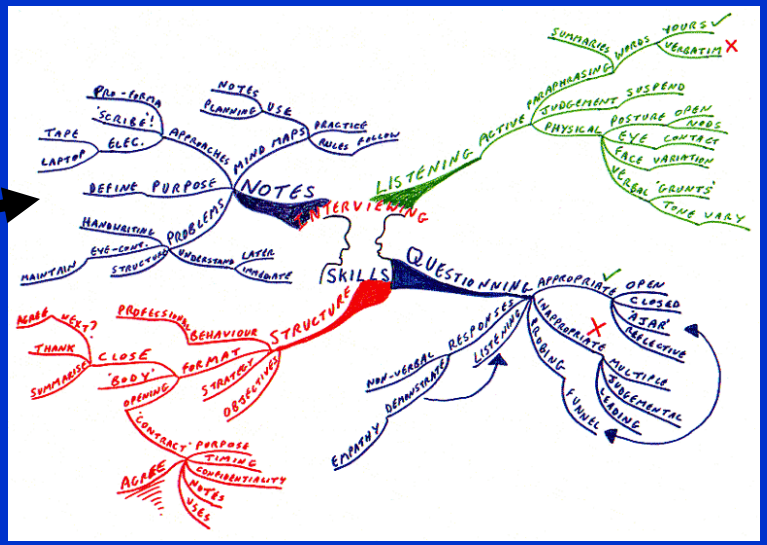
Emergent	Highest layer with trees reaching **50 metres.**
Canopy	Most life is found here as It receives **70% of the sunlight** and **80% of the life.**
U-Canopy	Consists of trees that reach **20 metres high.**
Shrub Layer	Lowest layer with **small trees** that have adapted to living in the **shade.**

How to Revise

The Best Ways to Revise

- Use 'Memory Maps' for complicated topics - use pictures and symbols that spring to mind.

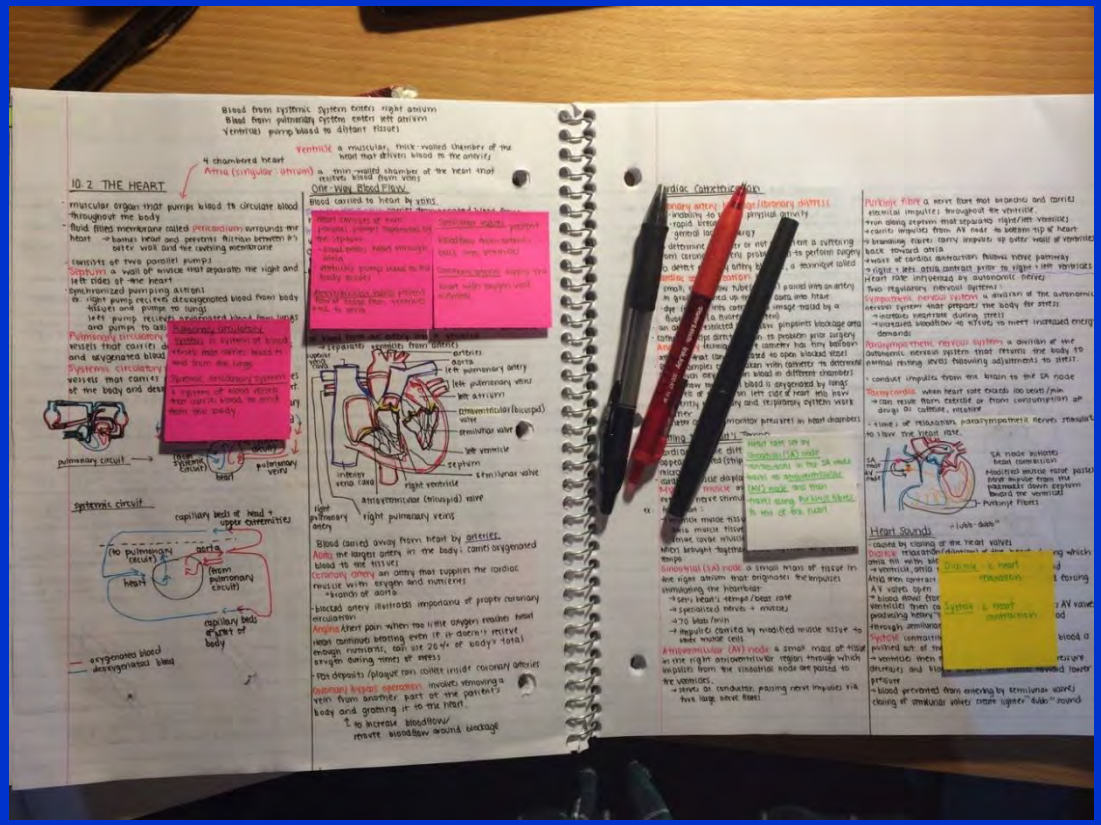
Most people remember pictures better than words



- Put finished memory maps above your desk/bed - just above eye level.

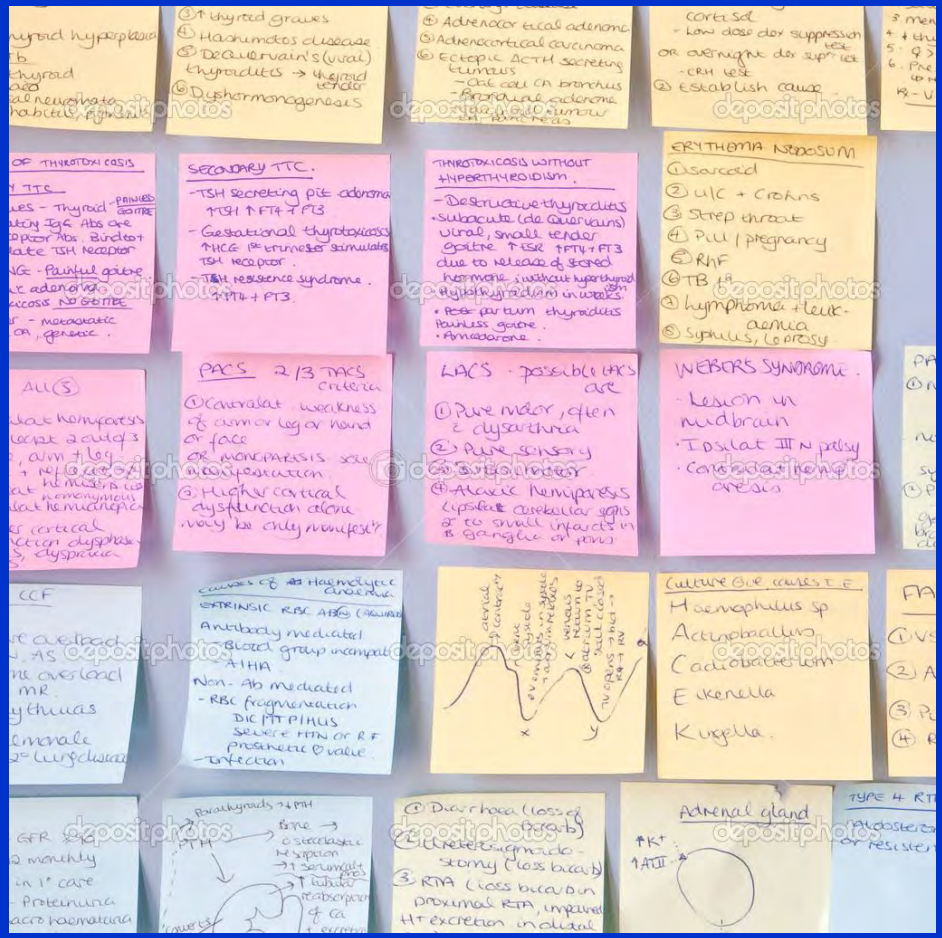
Revision techniques

- Different coloured paper/ink – summarise, Post-it notes.
- There are studies on using different colours to revise as "they access different parts of your brain".

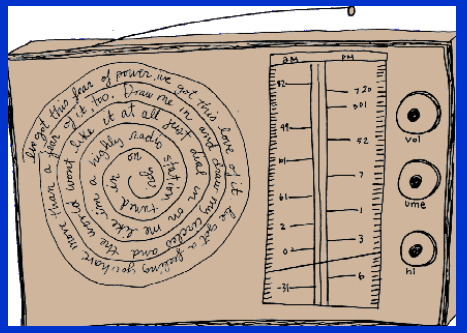


Revision techniques

- **Post-it notes -** These can be stuck in or on any place that they will be seen regularly. They can also be changed from one week to the next.
- Put them on or above mirrors, next to light switches, on the cupboard door, on the wardrobe etc.



The Best Ways to Revise



- You may need to listen to music (**not the radio**) when you revise.

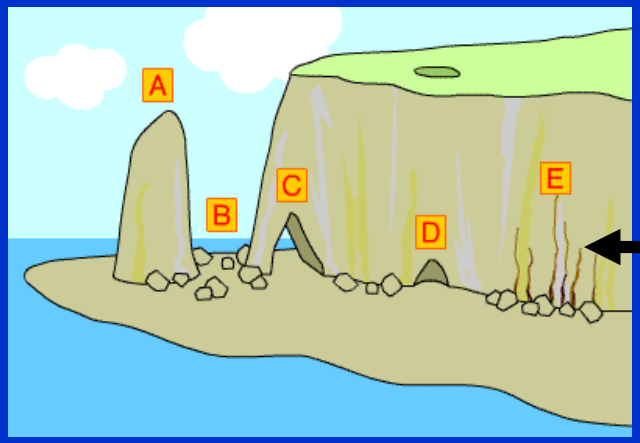
- You may need to make up songs/rhymes to help you remember.

- You may need to say things out loud.

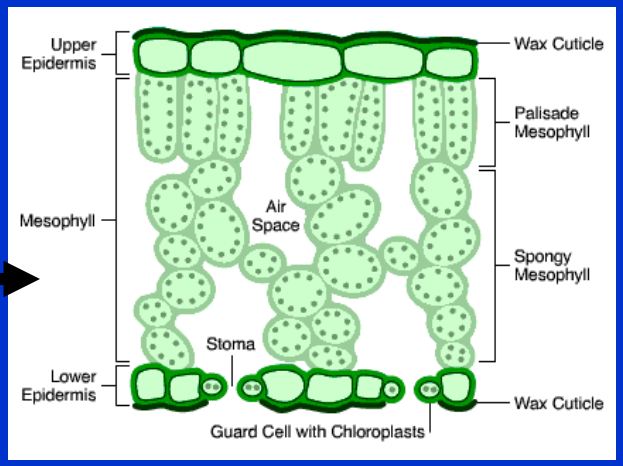
The Best Ways to Revise

- You may need to be active… cutting up 'heads and tails' and matching them up again…

Mouth	grinds up the food
Oesophagus	connects the mouth to the stomach
Stomach	adds acid to the food to break it down
Duodenum	connects the stomach to the small intestine



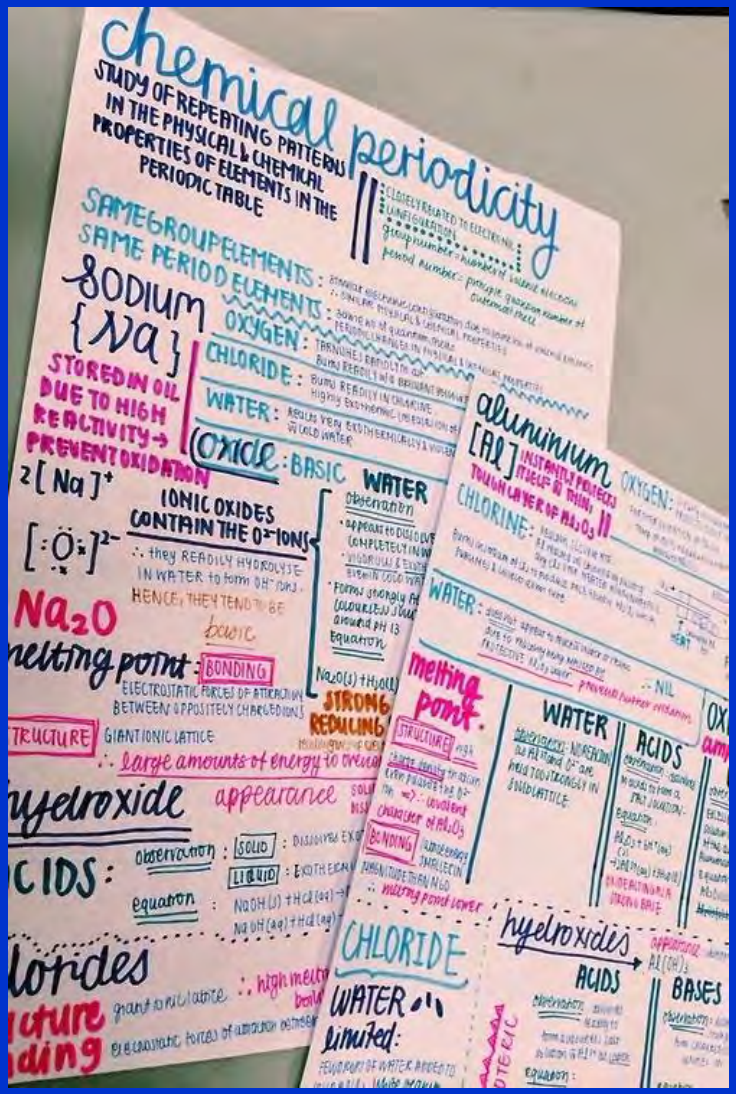
- Remember labelled diagrams



Revision techniques

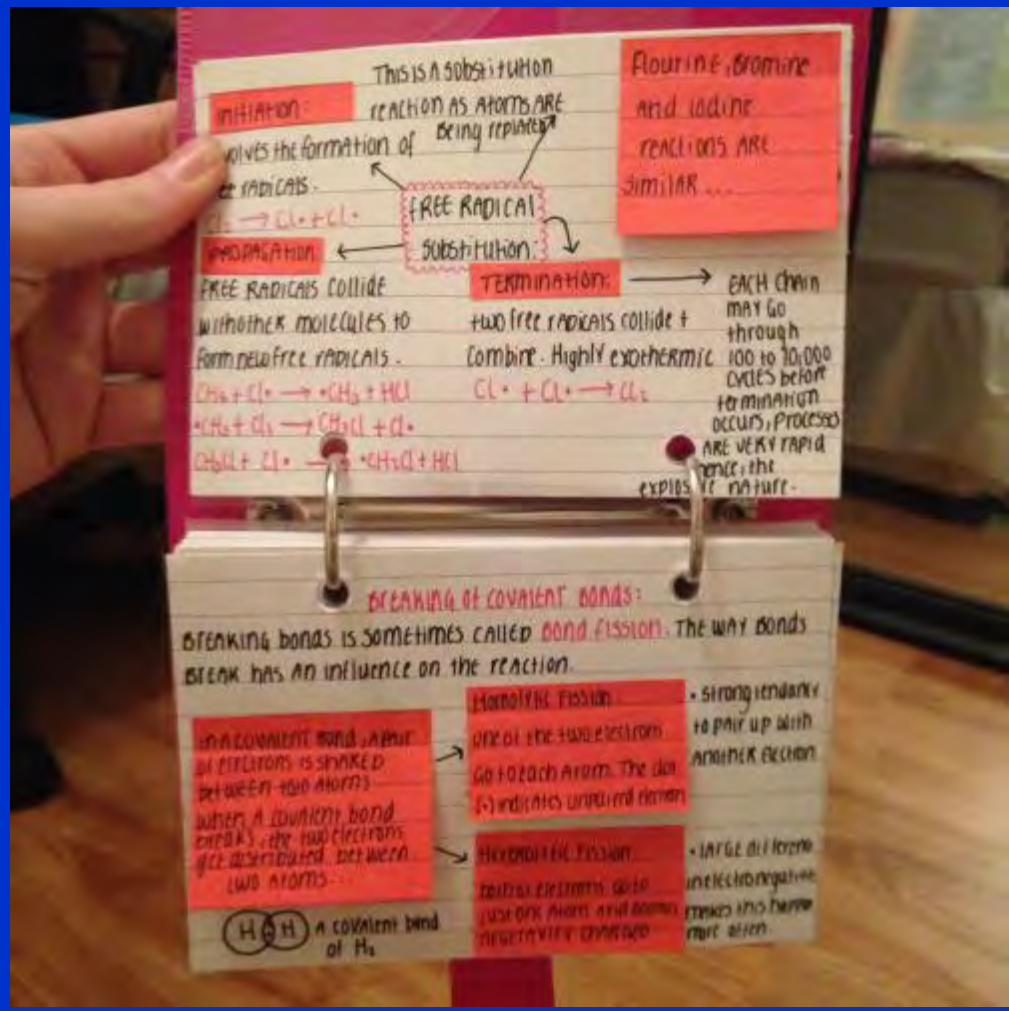
- **Posters –**

Using posters on your wall is a good starting point. Going over the information is beneficial; if you put the poster up on your wall and recite it, it will pay off.



Revision techniques

- **Revision Cards –** It is a great idea to buy some revision cards or make your own by cutting A4 paper into 4.
- On these you can make notes on different topics. These can be colour coded and carried around with you for reading.



Making it Stick

- Remind yourself over and over … Keep 'topping up'.

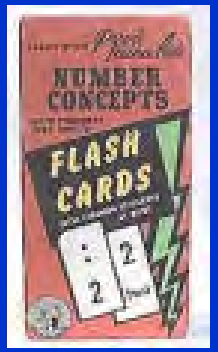
- 'Look, Cover, Write, Check'.

- Get practice papers

OCR AQA Edexcel

- Highlighting

- Make your own flash cards



- Make 'jigsaws'

Making it Stick

- Check with your teachers what you should know… **go to revision classes, P6.**

- Watch BBC Bitesize Videos
- Use the BBC Bitesize Website

- Work with someone else …

'The best way to learn is to teach…'

Work in silence and recreate exam conditions.

Simulate exam conditions by using timings.

Test the knowledge you have just learnt. Testing yourself and immediately checking whether it is correct or not means it's more likely to stick.

Try exam questions or even getting family members to quiz you.

Unit 1 Section B: The Living World

TR1 Describe and explain the physical characteristics of tropical rainforests: Climate, soils and vegetation (and examine their interaction).

- Explain, with reference to an example, why it is important to retain biodiversity. [4]
- Explain the features of plants and soils in the Tropical Rainforest. [4]
- Outline one reason for the high levels of biodiversity in tropical rainforests.(2))

TR2 Describe how plants and animals have adapted to living in the TRF

- Describe and explain the main plant adaptations in a tropical rainforest environment. [6]

TR3 Examine the causes of deforestation

- Using an area of tropical rainforest that you have studied, assess the importance of different human activities in causing deforestation. *(9)**

TR4 Evaluate the impacts deforestation with a named case study

- 'The rainforest is more valuable when left intact than when destroyed.' Using a case study, use examples to support or challenge this view. [9]
- Using examples, explain how deforestation can have economic impacts.(6)
- Using **Figure 8** and your own understanding, explain how development in tropical rainforests creates economic advantages but at a cost to the environment.

TR5 Know the importance of TRF and ways in which they can be managed effectively

- Describe and explain two benefits of international cooperation in sustainably managing tropical rainforests. [4]
- 'The rainforest is more valuable when left intact than when destroyed.' Using a case study, use examples to support or challenge this view. [9]
- Outline two ways that selective logging can help make tropical rainforests more sustainable. *(4)*
- Suggest two ways that debt reduction can help make tropical rainforests more sustainable. *(4)*

TR6 Explain how TRF can be managed sustainably with key examples

- Outline two ways that selective logging can help make tropical rainforests more sustainable. *(4)*
- Suggest two ways that debt reduction can help make tropical rainforests more sustainable. *(4)*
- Suggest how ecotourism can help in managing tropical rainforests sustainably. (4)

Unit 1 Section B: The Living World

TR1 Describe and explain the physical characteristics of tropical rainforests: Climate, soils and vegetatio examine their interaction).

- Explain, with reference to an example, why it is important to retai
- Explain the features of plants and soils in the Tropical Rainforest
- Outline one reason for the high levels of biodiversity in tropical ra

TR2 Describe how plants and animals have adapted to living in the TRF

- Describe and explain the main plant adaptations in a tropical rainfo

TR3 Examine the causes of deforestation

- Using an area of tropical rainforest that you have studied, assess th importance of different human activities in causing deforestation. *(9)*

TR4 Evaluate the impacts deforestation with a named case study

- 'The rainforest is more valuable when left intact than when destroyed study, use examples to support or challenge this view. [9]
- Using examples, explain how deforestation can have economic impa
- Using **Figure 8** and your own understanding, explain how developme rainforests creates economic advantages but at a cost to the environ

TR5 Know the importance of TRF and ways in which they can be managed effectively

- Describe and explain two benefits of international cooperation in su tropical rainforests. [4]
- 'The rainforest is more valuable when left intact than when destroy study, use examples to support or challenge this view. [9]
- Outline two ways that selective logging can help make tropical rain sustainable. *(4)*

TR6 Explain how TRF can be managed sustainably with key examples

- Suggest two ways that debt reduction can help make tropical rainfo sustainable. *(4)*
- Outline two ways that selective logging can help make tropical rain
- Suggest two ways that debt reduction can help make tropical rainfo
- Suggest how ecotourism can help in managing tropical rainforests

This can be advanced by using examiner reports to spot common errors or how well answered the question was.

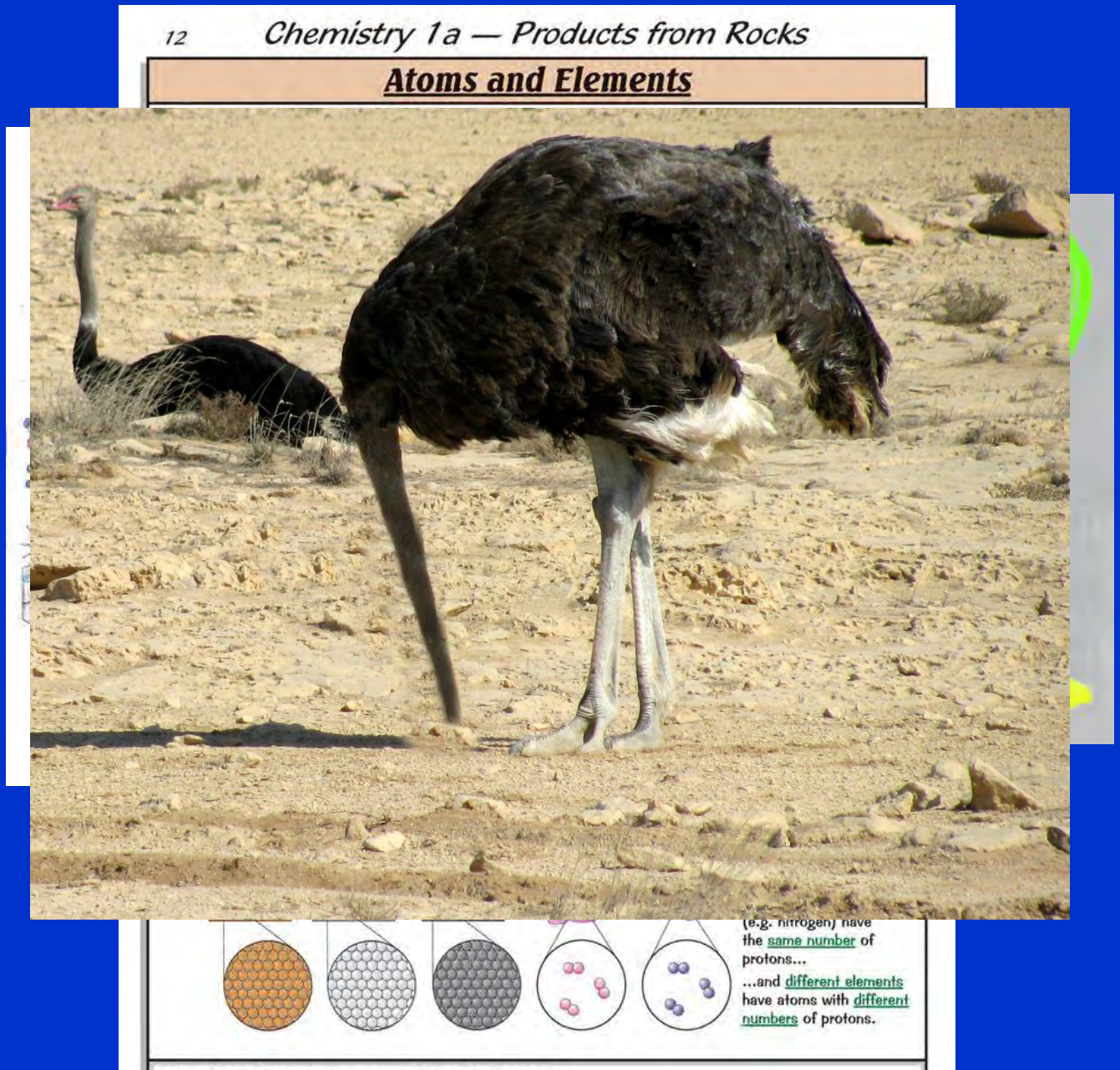
Use the mark scheme/model answer to improve the answer RED PEN IMPROVEMENTS

The most important part is checking, getting feedback on your practice.

Learn how to read mark schemes or use model answers to see how effective your revision has been.

Effective Revision

What's the current situation?



Failure?

Success?

6th form

Achieve your potential

Revision techniques

https://www.youtube.com/watch?v=DwqQdYmXkVk