

English:

How to support revision at home.

English Literature:

Shakespeare and unseen poetry will still be compulsory.

The two papers will now be structured like this:

Power and conflict	Paper 1 – choose any 2	Paper 2 - compulsory
	Paper 1A Anthology of poetry – 1 item 30 marks (AO1, AO2, AO3)	Section A Shakespeare – 1 item Macbeth 30 marks (AO1, AO2, AO3) + 4 marks (AO4)
	Paper 1B 19th century – 1 item 30 marks (AO1, AO2, AO3)	Section B Part 1: unseen poem essay 24 marks (AO1, AO2) + 4 marks (AO4) Part 2: unseen poetry comparison 8 marks (AO2)
LotF / AIC	Paper 1C Modern prose/drama – 1 item 30 marks (AO1, AO2, AO3)	

**There have
been
changes to
the GCSE in
light of
COVID.**

Knowledge



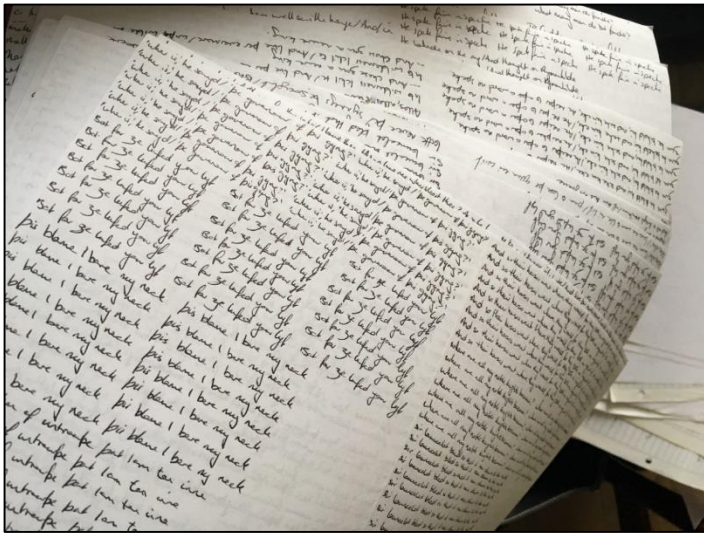
- Evidence/quotations
- Analysis of evidence → both language, structure and form
- Contextual knowledge
- Events in the text
- The writer's surname

Before you even begin an exam, you need to know the material that will be tested.

- This is the stuff you have absolute control of before walking into an exam hall.
- This is also the stuff that you may end up not using all of – it depends on given questions. That's the way it is.
- 20 minute chunks of knowledge

English Literature (knowledge revision):

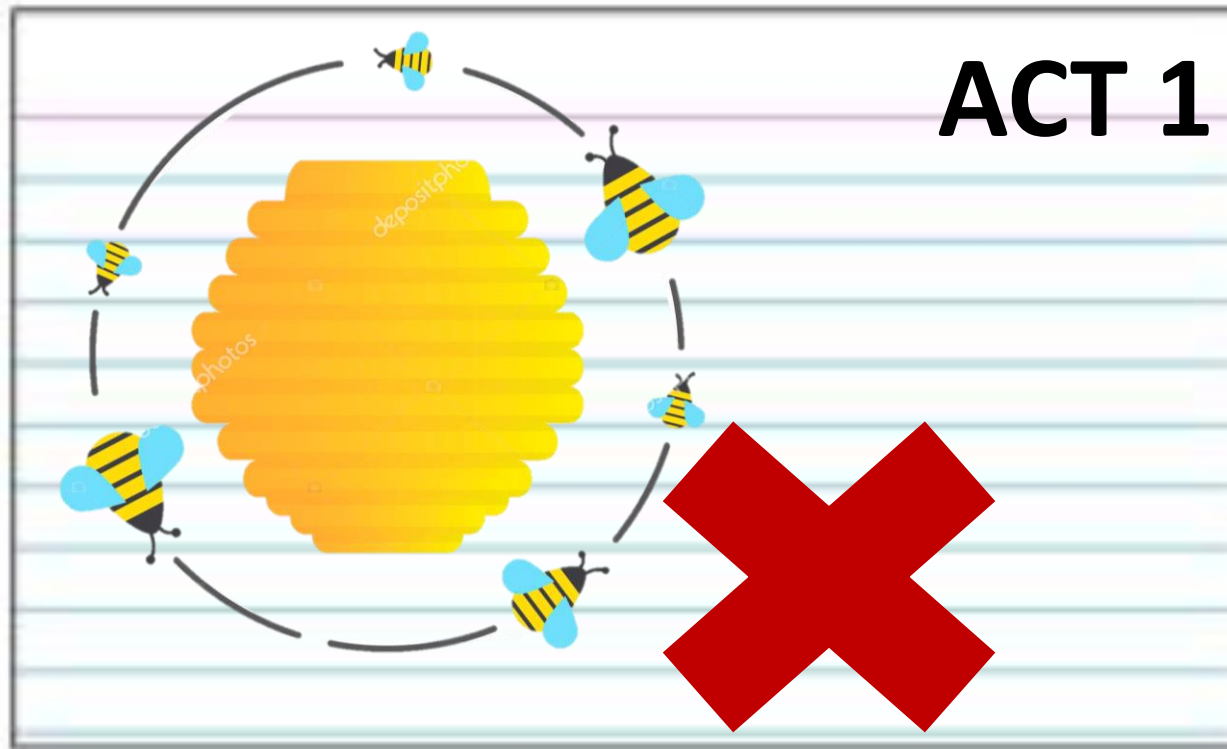
	Activity
Knowledge	Write out key quotes five times over Cover/take quotation away and recall by writing out the quote again
	Record yourself saying your key quotes and play this back to yourself repeatedly
	Produce revision flash cards with key quotes on one side and a pictorial representation of the quote on the other. These can then be used by other people to test you, with the picture as a prompt
	Test yourself by doing a knowledge dump – either speak for 60 seconds, non-stop, about a character/theme OR write down everything you can think about a character/theme



Blank out words in quotes

Repeat quotes

Hold flash cards up and hear the reverse



Front - YOU

ACT 1

Birling: as if we were all mixed up together like bees in a hive – community and all that nonsense

We + community → we initially positioned to show Birling family comes before everyone else

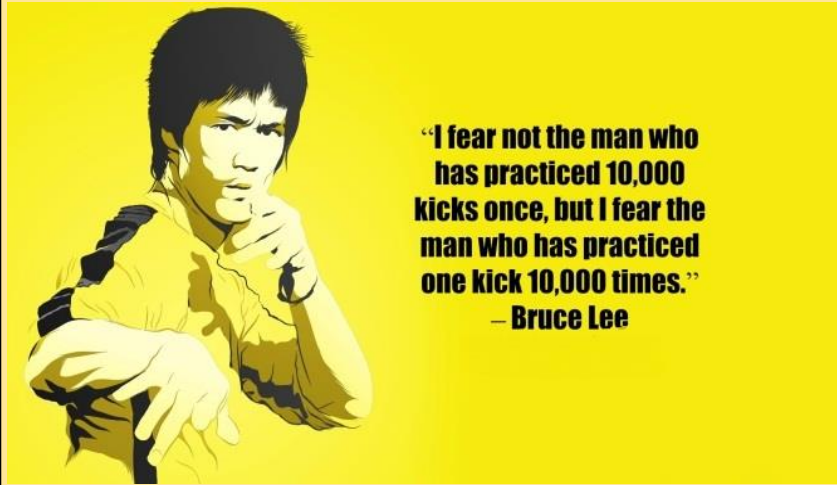
Separation of **dash** → B distances himself from others

Simile → connotations of workers, production of the greater good with hives → one for all; all for one

All that nonsense → flippant and disparaging tone, shows socialist views are seen as illogical and insane to B

Back - Tester

Application



- *Answering a question*
- *Planning and selecting relevant knowledge*
- *Academic writing style*
- *Writing in timed conditions*

For your Literature (and Language) you will be marked on your ability to apply your knowledge to a question.

It is responsive; however, by applying your knowledge lots of times to different situations, you will become more skilled at it.

- Planning essay responses
- **Timed** writing
- Draft introductions/overviews
- Prepare 'mini' analysis of key quotes / structural features → only three sentences

English Language:

English Language						
!! PLEASE NOTE – THE BOARD SUGGEST YOU SPEND 15 MINS READING AND PLANNING AT THE START OF BOTH LANGUAGE EXAMS !!						
		QUESTION	WHAT DO I HAVE TO DO?	WHICH AO?	MARKS AVAILABLE?	SUGGESTED TIMINGS
Paper One	Reading	1	Identify four pieces of information from an extract	AO1	4	5 MINUTES
		2	Write about the writer's use of language + the effect(s) of the devices and techniques they use	AO2	8	10 MINUTES
		3	Write about how the text is structured	AO2	8	10 MINUTES
		4	Evaluate both a quote about the text + the text itself	AO4	20	20 MINUTES IN TOTAL (e.g. 5 minutes planning + 15 minutes writing up)
	Writing	5	Produce either a piece of descriptive writing or a piece of narrative writing, making sure my writing is accurate	AO5	24	45 MINUTES IN TOTAL (e.g. 5 minutes planning + 35 minutes writing + 5 minutes checking / editing.)
				AO6	16	
Paper Two	Reading	1	Identify four true statements from a list of eight	AO1	4	5 MINUTES
		2	Produce a summary using information from two texts	AO1	8	8 MINUTES
		3	Write about the writer's use of language + the effect(s) of the devices and techniques they use	AO2	12	12 MINUTES
		4	Compare two writers' perspectives and writing methods	AO3	16	20 MINUTES IN TOTAL (e.g. 5 minutes planning + 15 minutes writing up)
	Writing	5	Produce one piece of transactional writing (article / speech / letter etc.) making sure my writing is accurate	AO5	24	45 MINUTES IN TOTAL (e.g. 5 minutes planning + 35 minutes writing + 5 Minutes checking/editing.)
				AO6	16	

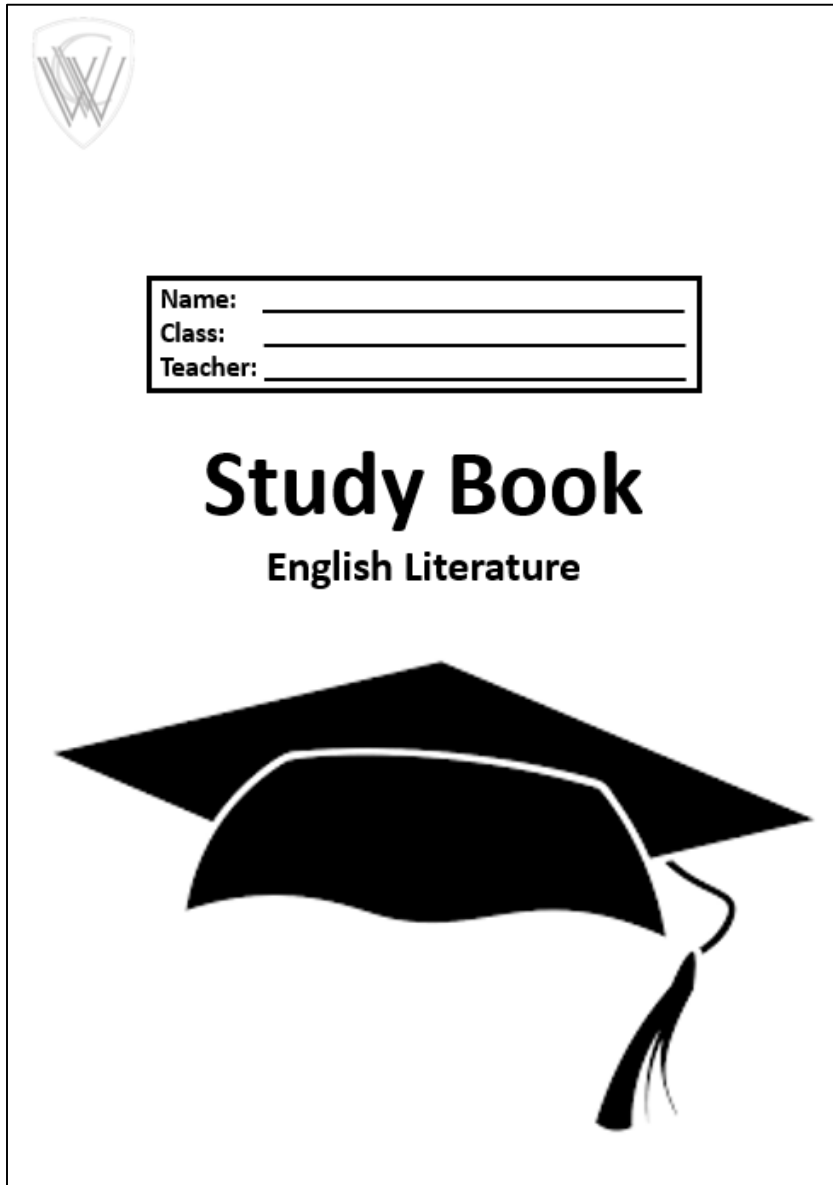
English Language - Reading:

- Practise speed reading of unseen articles/short stories + verbally say what it is about
- Timed example responses
- Read through past papers and the mark scheme to see patterns and expectations (see exercise books)
- Re-draft earlier responses in light of mark scheme

English Language - Writing:

- Plan stories based on titles/ images / plan non-fiction tasks
- Timed responses
- Spelling tests
- Plan extended metaphors/semantic fields
- Revise key techniques and sentences structures
- RE-read and unpick model writing in exercise books

EduLink and exercise books:



- Revision booklets (see website + EduLink)
- Lecture notes
- Revision session materials – sign up when on
- Knowledge Organisers / Study Books
- Past papers and questions
- Revision guides → not just reading, but re-writing, using as a testing device, draw together revision guide and exercise books to create a new one etc.
- Seneca / Massolit

How revise for maths

Exam layout

- 3 papers 1 non-calculator, 2 calculator.
- Students have been emailed a list of topics. They will have been told whether they are sitting Higher or Foundation for the November mocks.
- Tiers of entry finalised after the February mocks.
 - Foundation (1 – 5)
 - Higher (4 – 9) with a safety net at grade 3.
- Students equally likely to achieve a grade 5 at either level.

What should they revise?



Higher Skills List

All students have been emailed a RAG rating topic list.

The corresponding Hegarty videos and clips numbers are also shown.

Give the topic a go or look up last percentage score and move from red to green.

Number

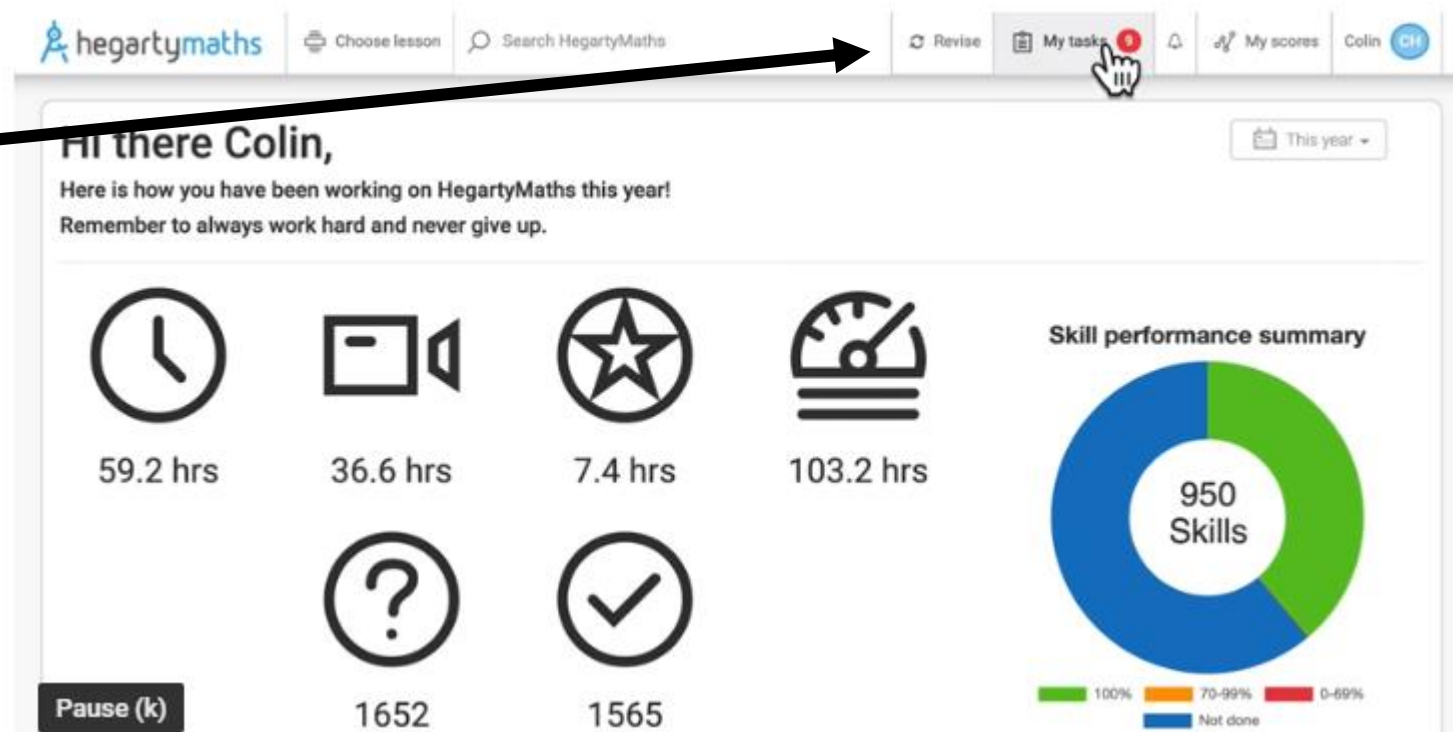
Topics	Clip Number	R	A	G
Calculating with roots and fractional indices	108, 109, 110			
Converting recurring decimals to fractions	53, 54			
Surds: Definition and estimating	111, 112			
Surds: Simplifying, multiplying and dividing	113, 114, 115			
Surds: Expanding brackets	116, 117			
Surds: Rationalising the denominator	118, 119			
Upper and lower bounds	137, 138, 139			
Error intervals	777			
Best buys	770			

Retrieval quizzes

There is a new revise tab available on Hegartymaths.

Click on Memri.

This takes all of the quizzes that students have done so far and gives them a quiz on a variety of tasks.



Complete past exam questions

- Past exam papers will be emailed out from the department via Edulink.
- <https://www.onmaths.com/> – electronic exam style questions that live marks.
- <https://drfrostmaths.com/browse.php> - search for past exam questions for a specific topic.
- Do not do these under test conditions, use them for exam technique.

Learn all formula

Areas of common 2D shapes including circles.

Pythagoras and Trigonometry formulae.

Volumes of common 3D shapes, including cylinders.

Quadratic formula.

Formula that students are not expected to learn are given with the question for which it is needed.

Edexcel GCSE (9-1) Maths: need-to-know formulae
www.edexcel.com/gcsemathsformulae

Areas	
Rectangle = $l \times w$	
Parallelogram = $b \times h$	
Triangle = $\frac{1}{2} b \times h$	
Trapezium = $\frac{1}{2} (a + b)h$	

Volumes	
Cuboid = $l \times w \times h$	
Prism = area of cross section \times length	
Cylinder = $\pi r^2 h$	
Volume of pyramid = $\frac{1}{3} \times$ area of base $\times h$	

Circles	
Circumference = $\pi \times$ diameter, $C = \pi d$	
Circumference = $2 \times \pi \times$ radius, $C = 2\pi r$	
Area of a circle = $\pi \times$ radius squared $A = \pi r^2$	

Pythagoras	
Pythagoras' Theorem For a right-angled triangle, $a^2 + b^2 = c^2$	
Trigonometric ratios (new to F) $\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$	

Compound measures	
Speed $\text{speed} = \frac{\text{distance}}{\text{time}}$	
Density $\text{density} = \frac{\text{mass}}{\text{volume}}$	
Pressure $\text{pressure} = \frac{\text{force}}{\text{area}}$	

Trigonometric formulae	
Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$	
Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$	
Area of triangle = $\frac{1}{2} ab \sin C$	

Quadratic equations	
The Quadratic Equation The solutions of $ax^2 + bx + c = 0$, where $a \neq 0$, are given by $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	

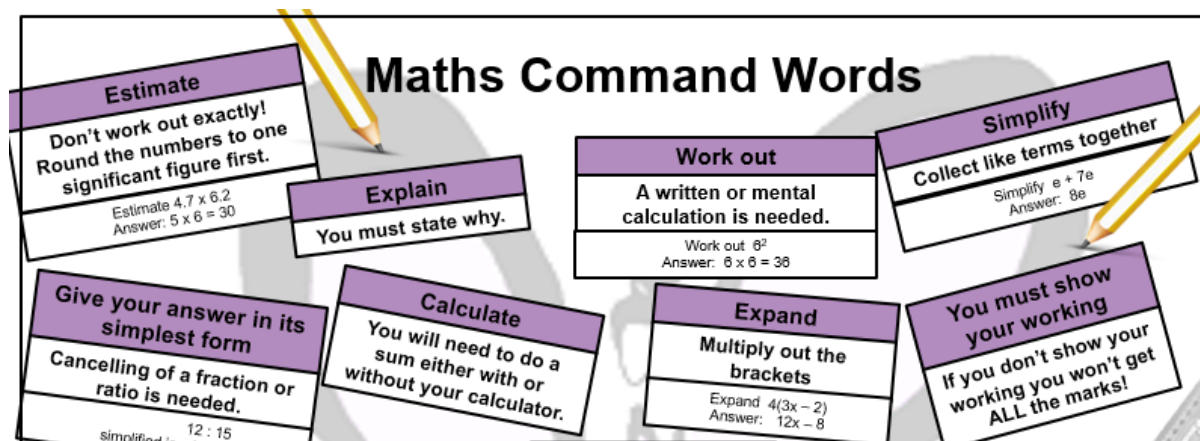
Know your equipment

- Know how to use your calculator effectively. It can:
 - Change time from hours/mins to decimal.
 - Convert between fractions and decimals.
 - Show a number as the product of primes.
 - Draw a table of values for you to plot a graph.
- Know how to use your compass to draw arcs and circles.
- Know how to draw and measure degrees with your protractor.




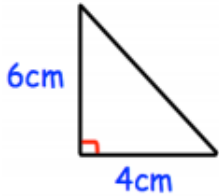
Learn your maths facts and key words

- Learn conversion of units.
- Multiplication tables.
- Learn the vocabulary.
- Learn the command words used in the exam.
- Use revision cards/ knowledge organiser

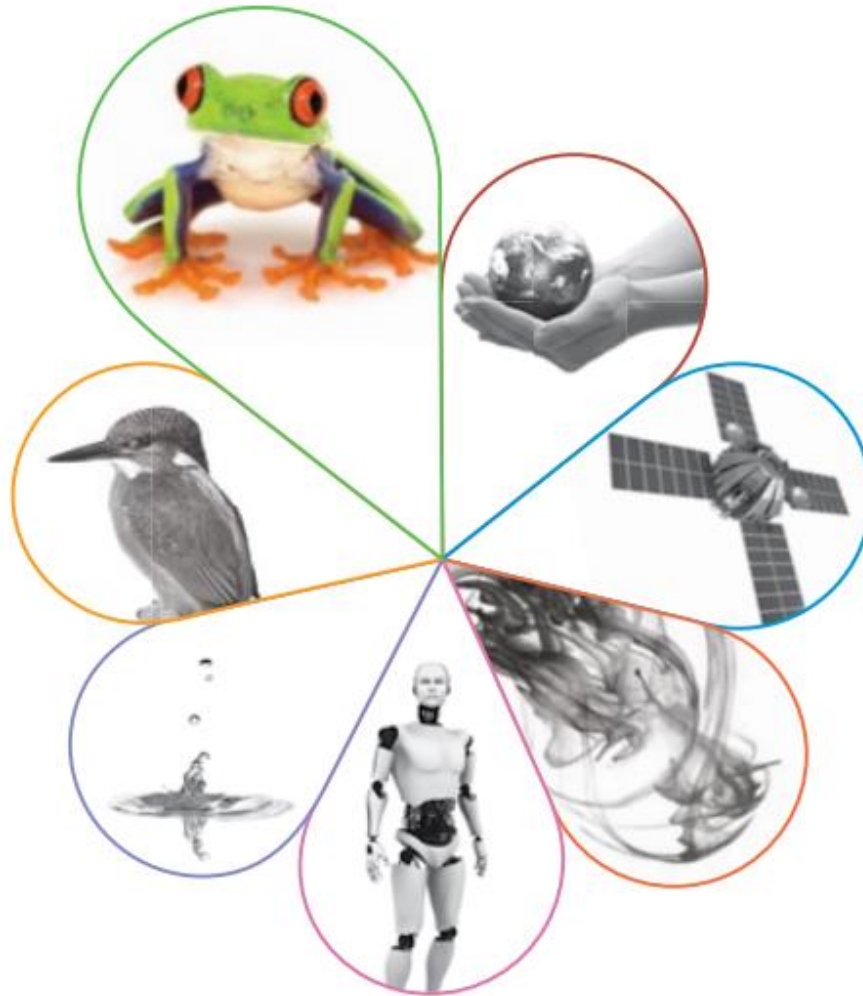


Things to avoid

- Revision guides – highlighting and reading are not enough. Only useful when used in conjunction with a workbook.
- Only doing topics you can already do.
- Being too tired – Not getting enough sleep can drop a student by a whole grade.
- Not answering a question because you can't finish it.
- Cramming – Little and often is the best thing to do. Try Corbett maths 5 a day.
<https://corbettmaths.com/5-a-day/gcse/>

Name: _____		5-a-day	Foundation Plus
1st January		 Corbett Maths	
Solve the inequality $3x + 4 \leq 22$			
A car decreases in value 10% a year. If it was bought for £5000, how much will it be worth after 2 years?			
		Calculate the length of the missing side	

AQA GCSE Science Courses



GCSE Science - Course

- Triple Science students gain 3 GCSE's – Biology, Chemistry and Physics.
- Double Award Science (Trilogy) students gain 2 GCSE's
- We hope to finish both courses by February half term – giving plenty of time for revision

Science Assessment

The assessment of GCSE Science is based on exams for 6 exams – 2 each for Biology, Chemistry and Physics

- Double Award (Trilogy) exams are 1 hour 15 minutes each
- Triple Science exams are 1 hour 45 minutes each
- There is NO Controlled Assessment but there will be questions on Required Practicals

Mock Exams

- The November Mock exams will be Paper 1 exams (3 papers)
- The March Mock exams will be Paper 2 exams (3 papers)
- Trilogy students will have 3 papers each of 1 hour 15 minutes
- Triple science students will have 3 papers each of 1 hour 45 minutes

Top 5 Tips:

How to prepare for the mock exams

1. Identify the areas of the course you need to focus on now
2. Use the Science Knowledge Organisers
3. Test, Test, Test – Student/student, Parent/student (low stakes though)
4. Get plenty of Exam Question practice
5. Know the Required Practicals for each Science subject

1. Identify the areas of the course you need to focus on now

AQA TRILOGY Biology (8464) from 2016 Topic T4.1 Cell biology				
Topic	Student Checklist	R	A	G
4.1.1 Cell structure	Use the terms 'eukaryotic' and 'prokaryotic' to describe types of cells			
	Describe the features of bacterial (prokaryotic) cells			
	Demonstrate an understanding of the scale and size of cells and be able to make order of magnitude calculations, <u>inc</u> standard form			
	Recall the structures found in animal and plant (eukaryotic) cells <u>inc</u> algal cells			
	Use estimations and explain when they should be used to judge the relative size or area of sub-cellular structures			
	<i>Required practical 1: use a light microscope to observe, draw and label a selection of plant and animal cells</i>			
	Describe the functions of the structures in animal and plant (eukaryotic) cells			
	Describe what a specialised cell is, including examples for plants and animals			
	Describe what differentiation is, including differences between animals and plants			
	Define the terms magnification and resolution			
	Compare electron and light microscopes in terms of their magnification and resolution			
	Carry out calculations involving magnification using the formula: magnification = size of image/size of real object - <u>inc</u> standard form			
	<i>Required practical 2: investigate the effect of antiseptics or antibiotics on bacterial growth using agar plates and measuring zones of inhibition</i>			
4.1.2 Cell Division	Describe how genetic information is stored in the nucleus of a cell (<u>inc</u> genes & chromosomes)			
	Describe the processes that happen during the cell cycle, including mitosis (<u>inc</u> recognise and describe where mitosis occurs)			
	Describe stem cells, including sources of stem cells in plants and animals and their roles			
	Describe the use of stem cells in the production of plant clones and therapeutic cloning			
	Discuss the potential risks, benefits and issues with using stem cells in medical research/treatments			

2. Science Knowledge Organisers



Why use Knowledge Organisers?

AO1

- Factual recall questions – 40% of each GCSE exam.
- 40% - % of marks required for grade 5 Biology (HT) 2019
- 40% - % of marks required for grade 3-3 in Combined Science (FT) 2019

There is a Knowledge Organiser for each topic you study in Science

Biology Topics

Paper 1 – topics 1-4

- Cell biology
- Organisation
- Infection and response
- Bioenergetics

Paper 2 – topics 5-7

- Homeostasis and response
- Inheritance, variation & evolution
- Ecology

Chemistry Topics

Paper 1 – topics 8-12

- Atomic structure and the periodic table
- Bonding, structure & properties of matter
- Quantitative chemistry
- Chemical changes
- Energy changes

Paper 2- topics 13-17

- The rate and extent of chemical change
- Organic chemistry
- Chemical analysis
- Chemistry of the atmosphere
- Using resources

Physics Topics

Paper 1 – topics 18-21

- Energy
- Electricity
- Particle model of matter
- Atomic structure.

Paper 2 – topics 22-24

- Forces
- Waves
- Magnetism
- Electromagnetism

Choose your Level

3 levels of organisers depending on your MEG/TAG

- Grade 1-3
- Grade 4-6
- Grade 7-9

How to get the most out of your Knowledge Organisers

- Reading them is NOT enough!



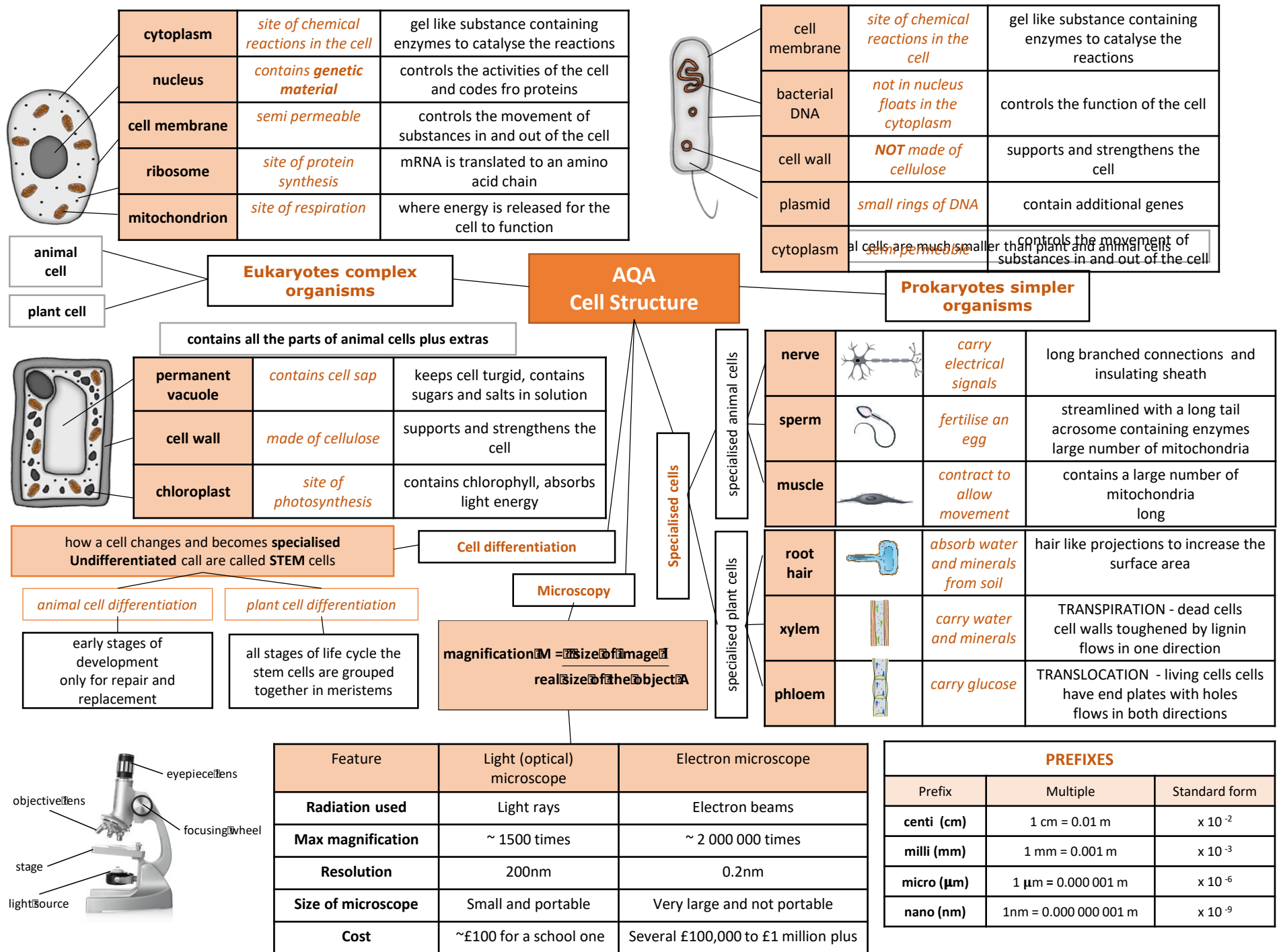
Use Active Revision Techniques

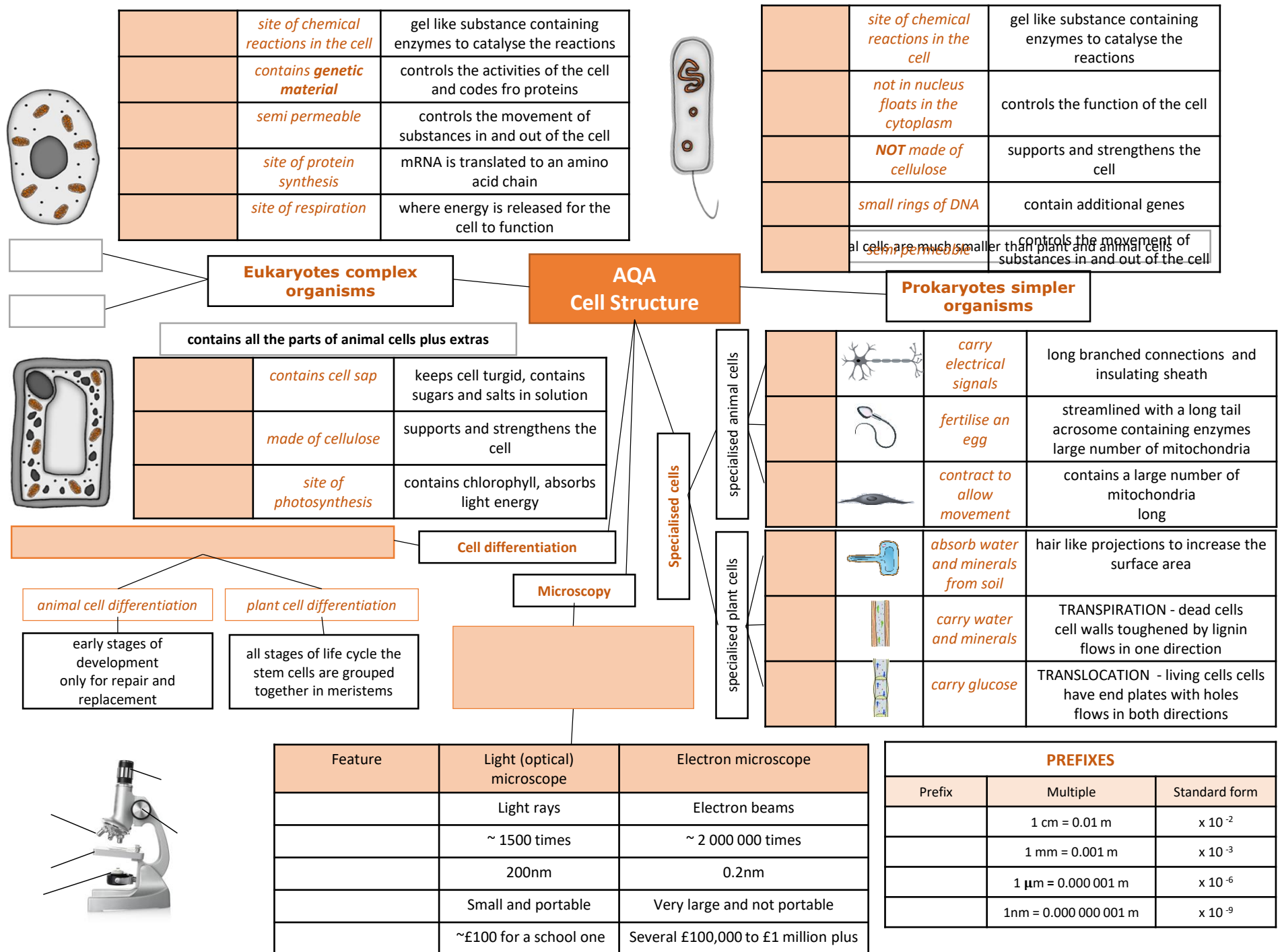
- Remind yourself over and over
- "Look, Cover, Write, Check"
- Remembering labelled diagrams
- Make summaries of the information e.g. "mind maps" or spider diagrams
- Make your own "Flash Cards"
- Practice on real exam questions
- Be clear about what you're expected to know
- Identify your strong and weak areas
- Test each other – or parents to test students

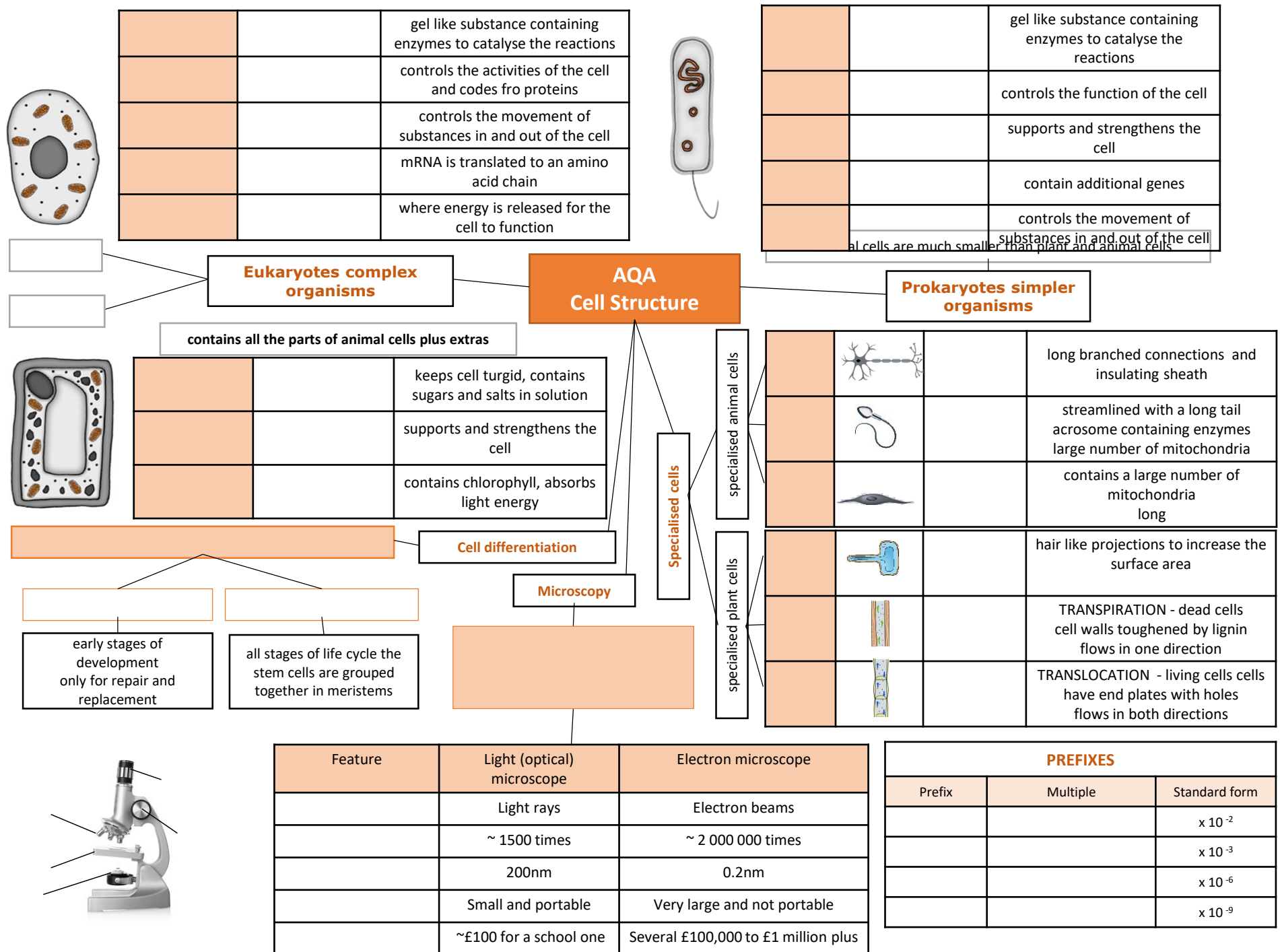
Some examples



Show Me











Eukaryotes complex organisms

AQA
Cell Structure

Prokaryotes simpler organisms

Bacterial cells are much smaller than plant and animal cells

contains all the parts of animal cells plus extras

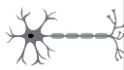




Cell differentiation




Microscopy

Specialised cells

specialised animal cells

specialised plant cells

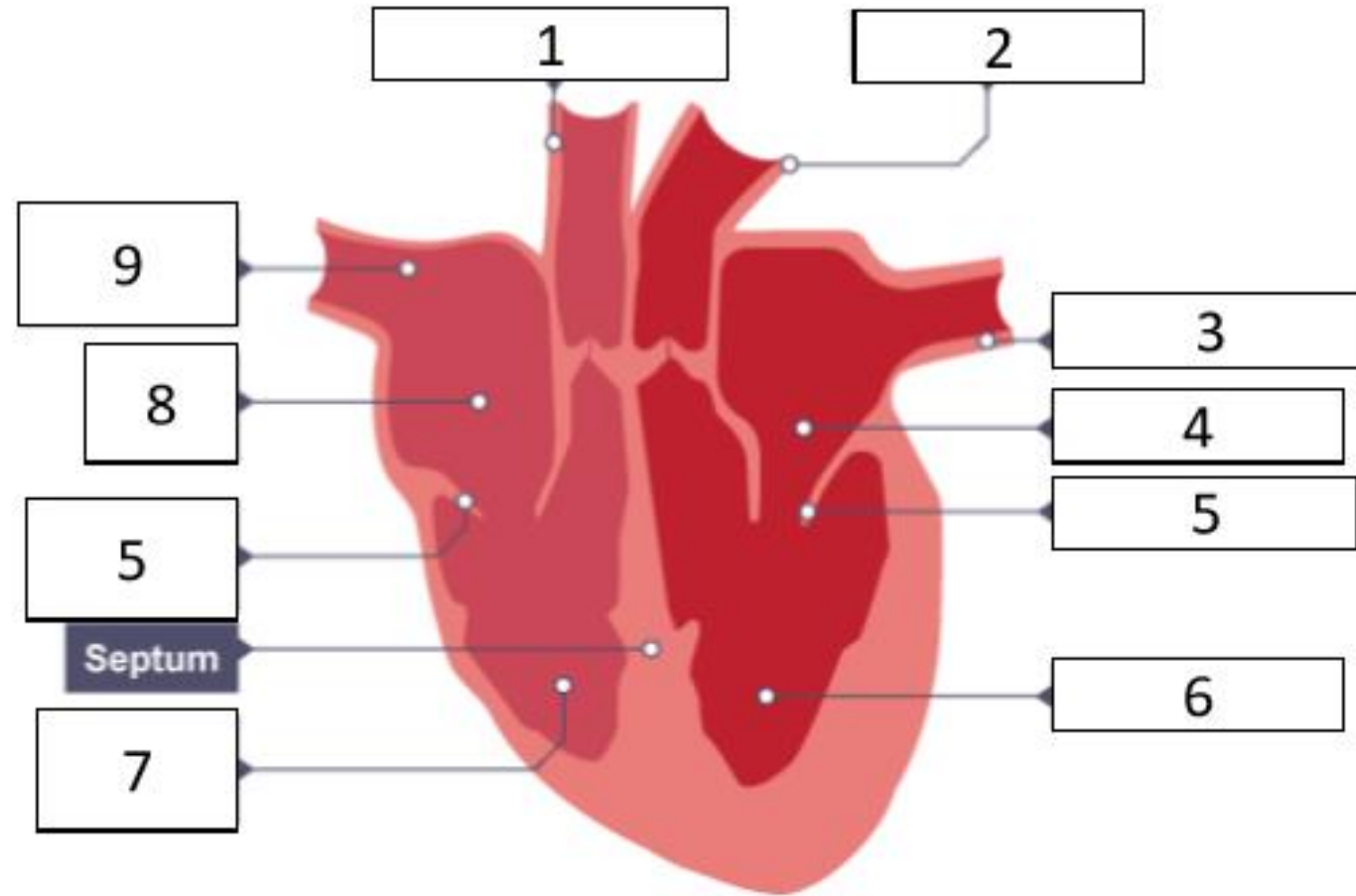
			
			
			



Feature	Light (optical) microscope	Electron microscope

PREFIXES		
Prefix	Multiple	Standard form

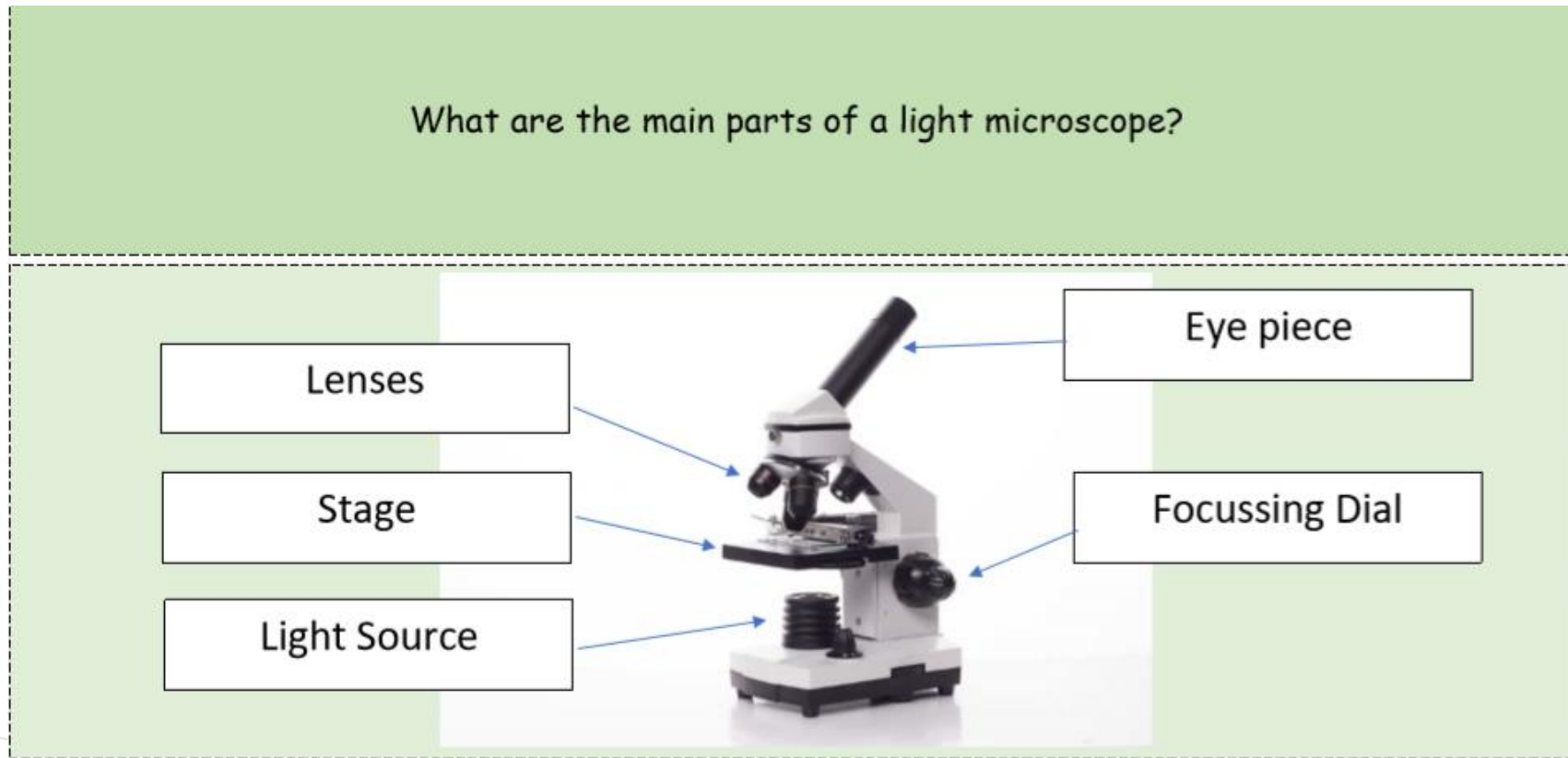
Remembering labeled diagrams



3. Test, Test, Test (low stakes!)

- Most of our students like using flashcards.
- Try using the ones we have provided to test the students on their knowledge.
- Do this in small chunks – 10 minutes at a time and have a bit of fun or a reward for getting the questions correct!
- Also - Use the Knowledge Organisers to test the students – we will!

Examples of Flashcards: Biology



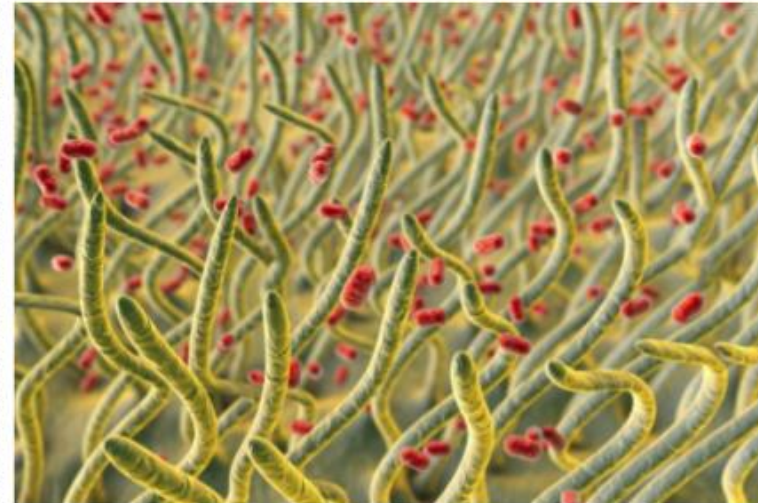
Card Number: 2
Topic: 1 Cell Structure

Level of Question: Secure
Specification: 4.1.1.5

Examples of Flashcards: Biology

How is the trachea and bronchi adapted to defend against pathogens?

Hairs and mucus trap dust and microbes. These are then carried away from cilia, which are tiny hairs which line the trachea.



Card Number: 2

Topic: 6 Infection and Response

Level of Question: Secure

Specification: 4.3.1.6

Examples of Flashcards: Chemistry

What methods can be used to separate a mixture?

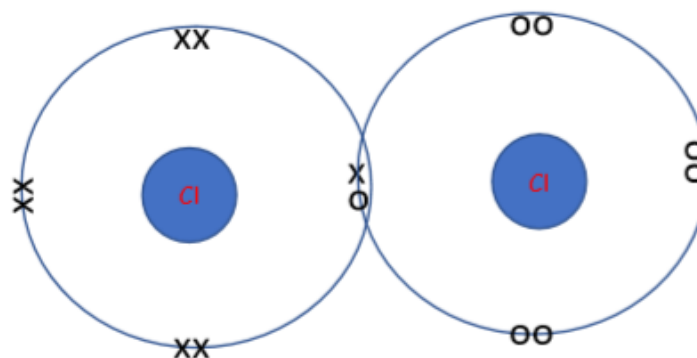
Filtration,
crystallisation,
simple distillation,
fractional distillation
and chromatography.

Card Number: 3
Topic: 1 Atomic structure and the periodic table

Level of Question: Secure
Specification: 4.1.1.1

Examples of Flashcards: Chemistry

Draw the bonding in Cl_2



Card Number: 4

Topic: 2 Bonding, structure and the properties of matter

Level of Question: Secure

Specification: 4.2.1.4

Examples of Flashcards: Physics

How is gravitational potential energy calculated?

$$g. \text{ p.e. } = \text{mass} \times \text{gravitational field strength} \times \text{height}$$

Card Number: 1
Topic: 1 Energy

Level of Question: Secure
Specification: 4.1.1.2

Examples of Flashcards: Physics

How does the motion of gas particles vary in different temperatures?

The higher the temperature, the greater the kinetic energy of each particle and so they move around more.

This causes more collisions with the walls of the container and so pressure is greater.

Card Number: 1
Topic: 3 Particle model of matter

Level of Question: Mastering
Specification: 4.3.3.1

4. Get plenty of Exam Question practice

- Open the folder 'Kerboodle Topic Tests'. For each topic studied there are exam type questions for you to try. Print these out and try one under exam conditions.
- Look at the mark scheme and see what you got right and where you went wrong.
- Re-draft your answer by adding in the information that you missed out.
- Do this in a different colour pen so it stands out

4. Get plenty of Exam Question practice

- Try the past papers from the AQA exam board site

5. Know the Required Practicals for each Science subject

- Questions on Required practicals make up 15% of each exam so you need to know them really well.
- A great YouTube site is 'free science lessons'.


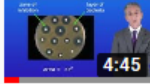




freesciencelessons

0:03 / 4:53

Biology Paper 1 Required Practicals

Freesciencelessons - 1/6



-  **GCSE Science Biology (9-1) Required Practical 1: Microscopes**
Freesciencelessons
4:54
-  **GCSE Science Biology (9-1 Triple) Required Practical 2: Culturing ...**
Freesciencelessons
4:45
-  **GCSE Science Biology (9-1) Required practical 3: Effects of osmosis on plan...**
Freesciencelessons
5:11
-  **GCSE Science Biology (9-1) Required practical 4: Food tests**
Freesciencelessons
3:54
-  **GCSE Science Biology (9-1) Required practical 5: Effect of pH on amylase**
Freesciencelessons
3:23
-  **GCSE Science Biology (9-1) Required Practical 6: Photosynthesis**
Freesciencelessons
3:53

And Finally...

- You get what you deserve!
- A few marks extra can change a grade
- Let's work together to ensure that the results in 2020 are our best ever.

Knowledge Organisers

Learning

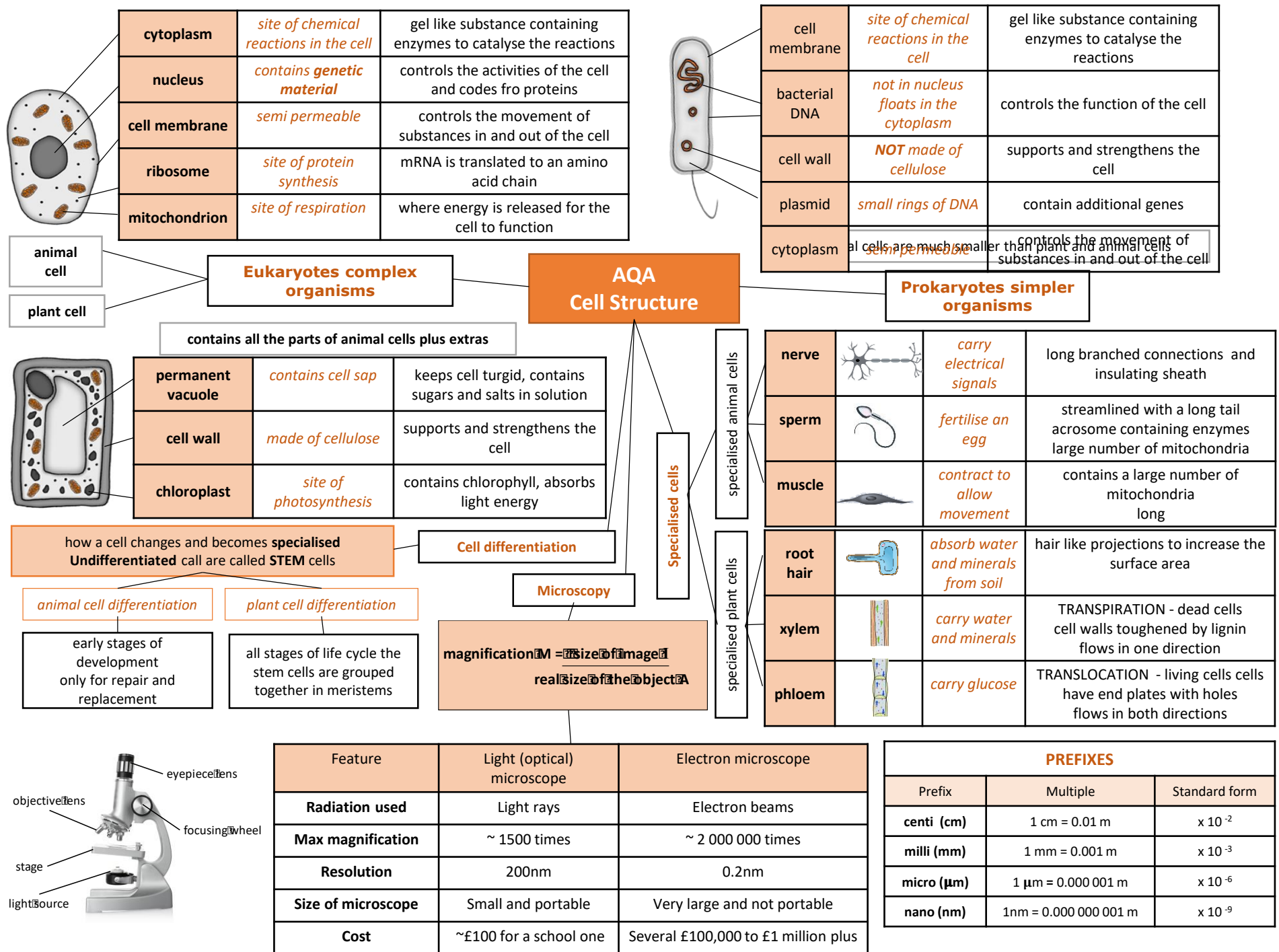
1. Encoding
2. Storage
3. Retrieval

Knowledge Organisers

- Spacing out revision: average mark of 74%
- Cramming: average mark of 49%

Why use (blank) KOs?

- Dunning-Kruger effect







Eukaryotes complex organisms

AQA
Cell Structure

Prokaryotes simpler organisms

Bacterial cells are much smaller than plant and animal cells

contains all the parts of animal cells plus extras

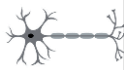




Cell differentiation




Microscopy

Specialised cells

specialised animal cells

specialised plant cells



Feature	Light (optical) microscope	Electron microscope

PREFIXES		
Prefix	Multiple	Standard form

Knowledge Organisers

The Testing Effect

- Students who had **one study session** followed by **retrieval practice** did **30% better** than those who did two sessions of reading
- The longer you need to remember information, the more powerful the **Testing Effect** is.
- Students rated re-reading as being more effective but students who mainly used **retrieval** remembered **over 50% more**.
- Students did **12% better** if they read the words out loud.

Knowledge Organisers

Stress

Students who revised using retrieval practice out-performed the students who re-read notes by 17-26%

Stress impairs memory because the increased **cortisol** blocks pathways near the hippocampus (part of the brain largely responsible for memory)

BUT

Retrieval offers a solution: generating an answer creates numerous and clear routes to accessing this information in our brain