GCSE English

Information for Parents

Your child is studying two GCSEs

GCSE Language

- Two 2 hour exams
- Completely unseen texts
- 20th narrative fiction
- Creative writing
- Comparison of 19th and 21st century non-fiction extracts
- Persuasive or transactional writing

GCSE Literature

- Two exams (2 hours and 2 ½ hours)
- Closed book exams
- Shakespeare play
- Poetry Anthology
- An Inspector Calls
- A Christmas Carol
- Comparison of two unseen poems

English is about skills as well as knowledge

Your child will need specific subject knowledge BUT a large part of their revision will be **practising** how they use that knowledge, particularly on their Language exams.

How can your child revise for….?

GCSE ENGLISH LANGUAGE

Revising for Reading components

- Fiction component
- Non-fiction component

- The exams are essentially a comprehension test – how well do students understand what they've read?

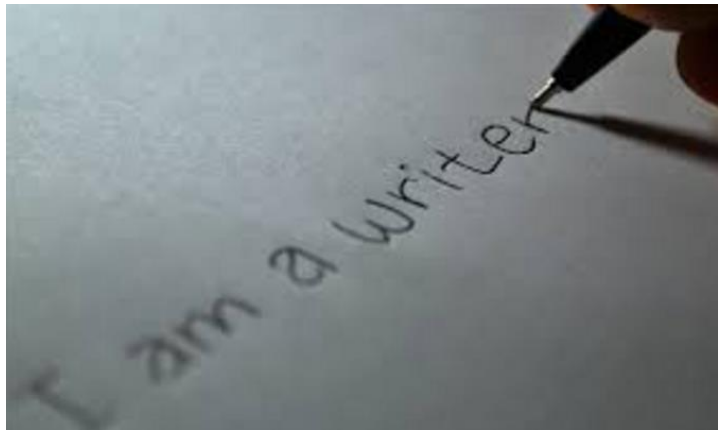
At home, students can revise by:

- going through their folder and previous work looking at targets set by their teacher. Practise questions with these targets in mind.
- practising the questions/assessment objectives that they find challenging.
- using SAM Learning and GCSEPod to access further online fiction, 19th and 21st non-fiction resources.
- practising 'R.A.T.ing' questions.
- practising the timing for questions until they can be answered within the time allocations (usually 15 minutes for a 10 mark answer).
- review examples responses given to them by their teacher and try to use them to improve their own answers.
- ensuring they know the format of the exam papers: i.e. how many marks each style of questions is worth; how long is needed on each question; what reading skills is being assessed on each question.

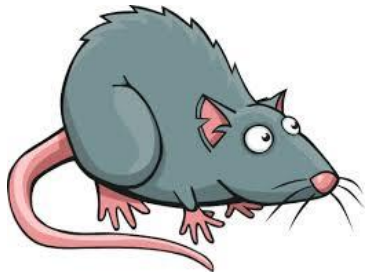
Revising for Writing components

- Write a short story
- Write two persuasive and/or transactional (real world situation) pieces

- Students are tested on their understanding of audience and purpose.



Reading and understanding the question before planning their answer.



Writing their answers: about five thoughtful paragraphs

Proofreading their answers.

At home, students can revise by:

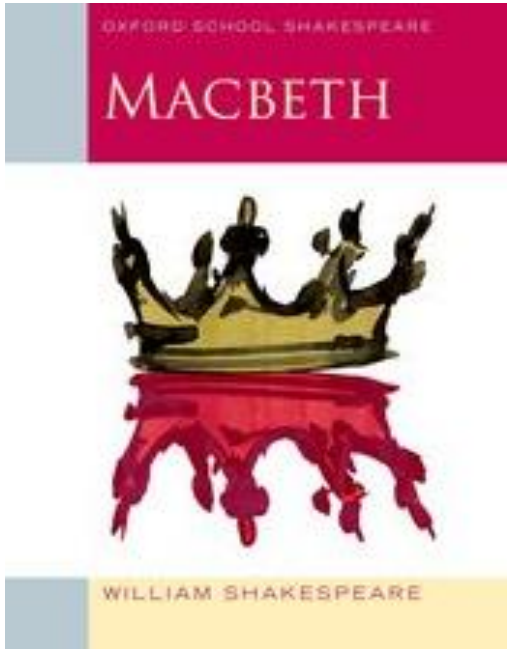
- practising 'R.A.T.ing' a variety of writing tasks for paper 2.
- practising planning responses to both writing sections: they need to be able to plan within a very specific time frame.
- practising writing opening paragraphs; different paragraph structures; using different techniques; writing closing paragraphs.
- spending time improving their proof reading skills by practising this skill. They can also independently use GCSEPod and SAM Learning to revise key spelling, punctuation and grammar.
- the closer students get to their exams, the more they need to be practising writing in timed conditions.

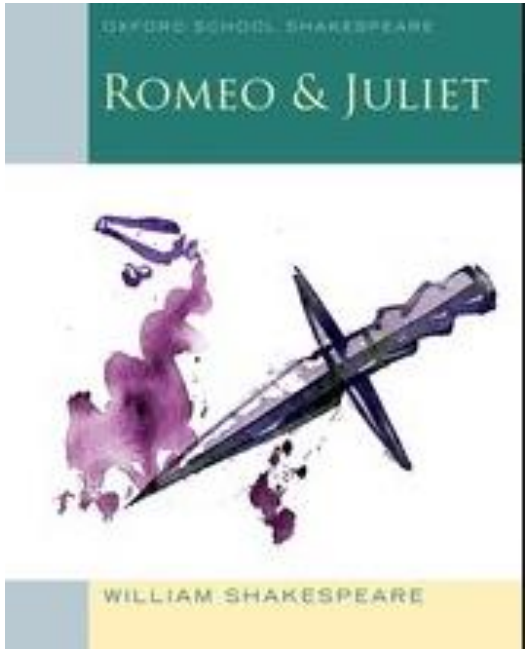
How can your child revise for….?

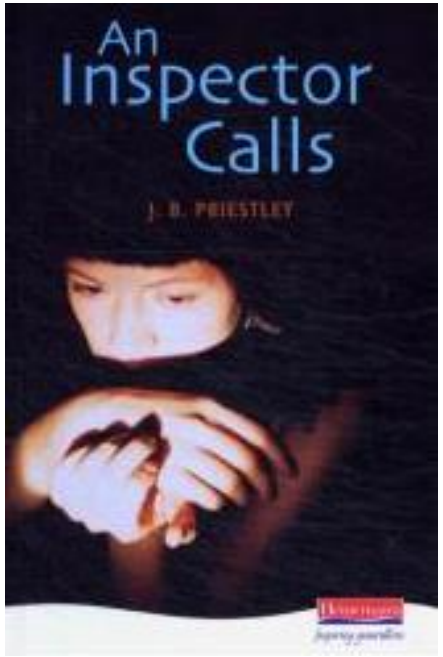
GCSE ENGLISH LITERATURE

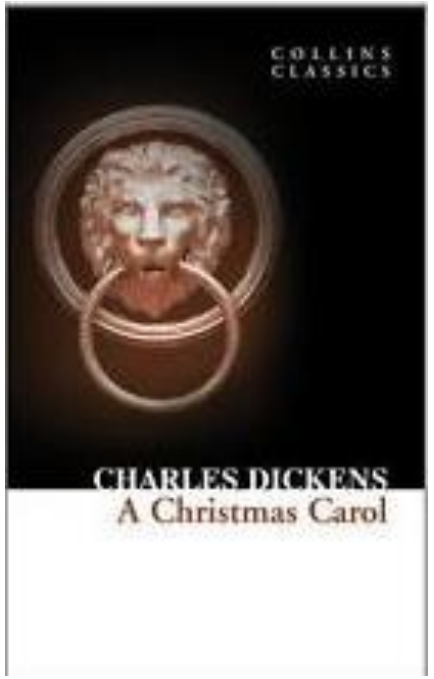
There's no substitute for reading the texts

Audio versions are available for free on YouTube or for purchase







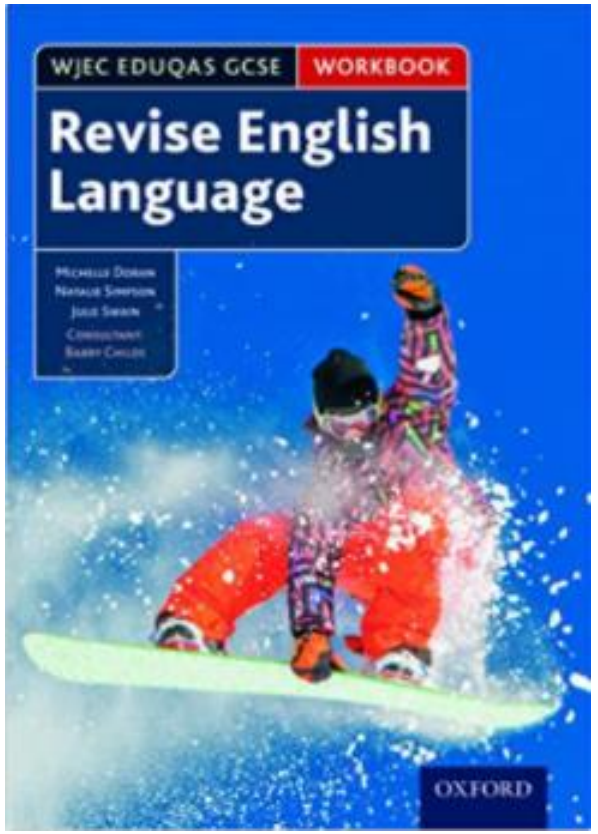


Revising for literature isn't about writing lots of essays…

At home, students can revise by:

- creating mindmaps, timelines and knowledge organisers for each literature text (they need to know characters and themes).
- re-reading key sections of each text.
- completing knowledge recall tests (there are lots on SAM Learning and GCSEPod).
- picking out key extracts for different characters and themes and practise analysing them so that they're developing analysis skills AND learning quotes at the same time.
- practising planning a wide variety of essay questions – they **don't** need to be writing an essay for every essay plan.
- read different types of poetry and practise the skill of comparison.
- practise essay planning for poetry comparison, as well as writing some complete essays.

All students have these to support them with their language revision:

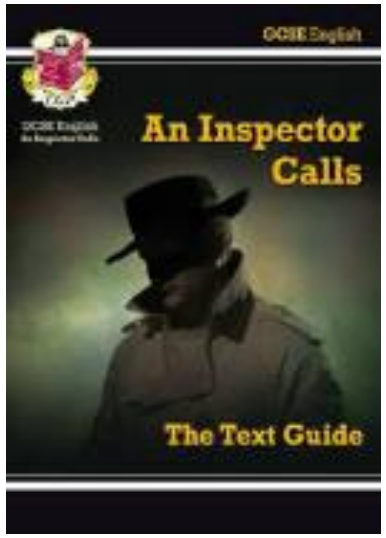


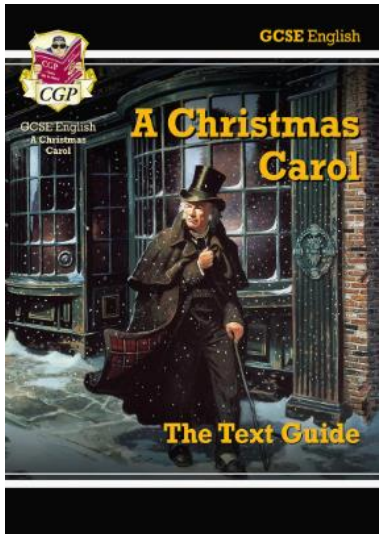
Literature: £2.85

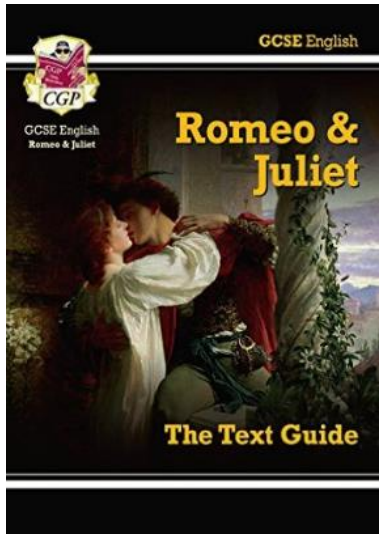
Revision books

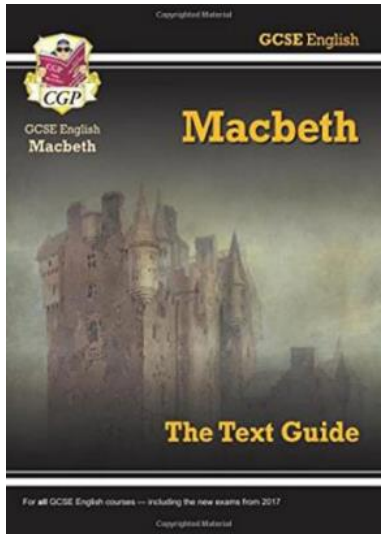
Language: £5.50

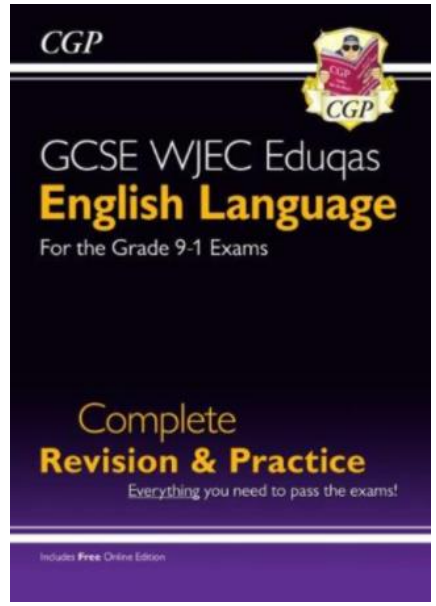
- **We have revision guides for both GCSEs.**
- The school library also has a section of revision books that students can use



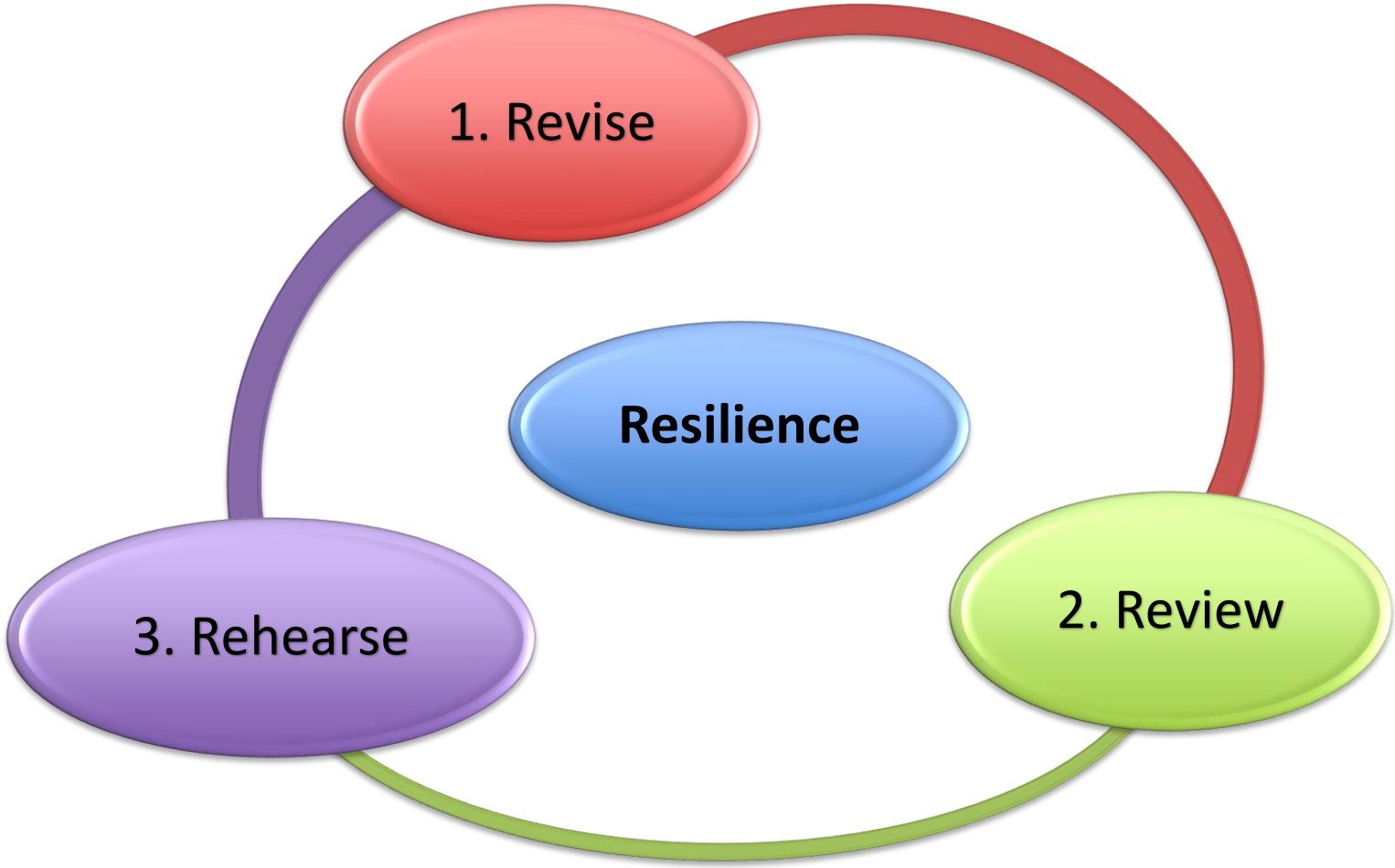








GCSE maths revision

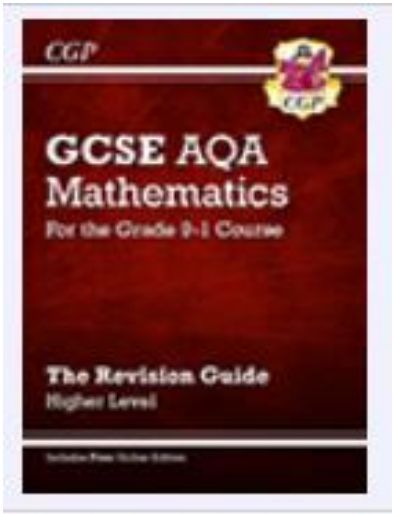


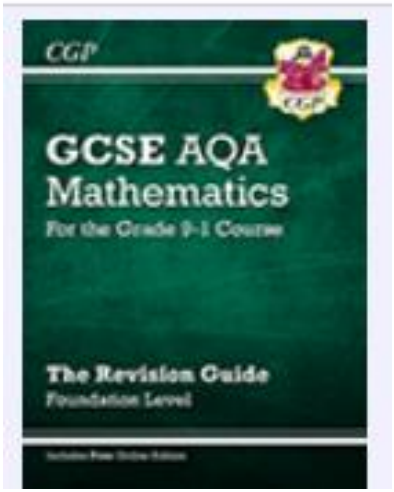
How can you help someone to prepare for a maths exam?

1. Revise

Revision Guide and Websites.

1. Revise





Revision Guide £2.85

Two Levels;
Foundation or Higher.

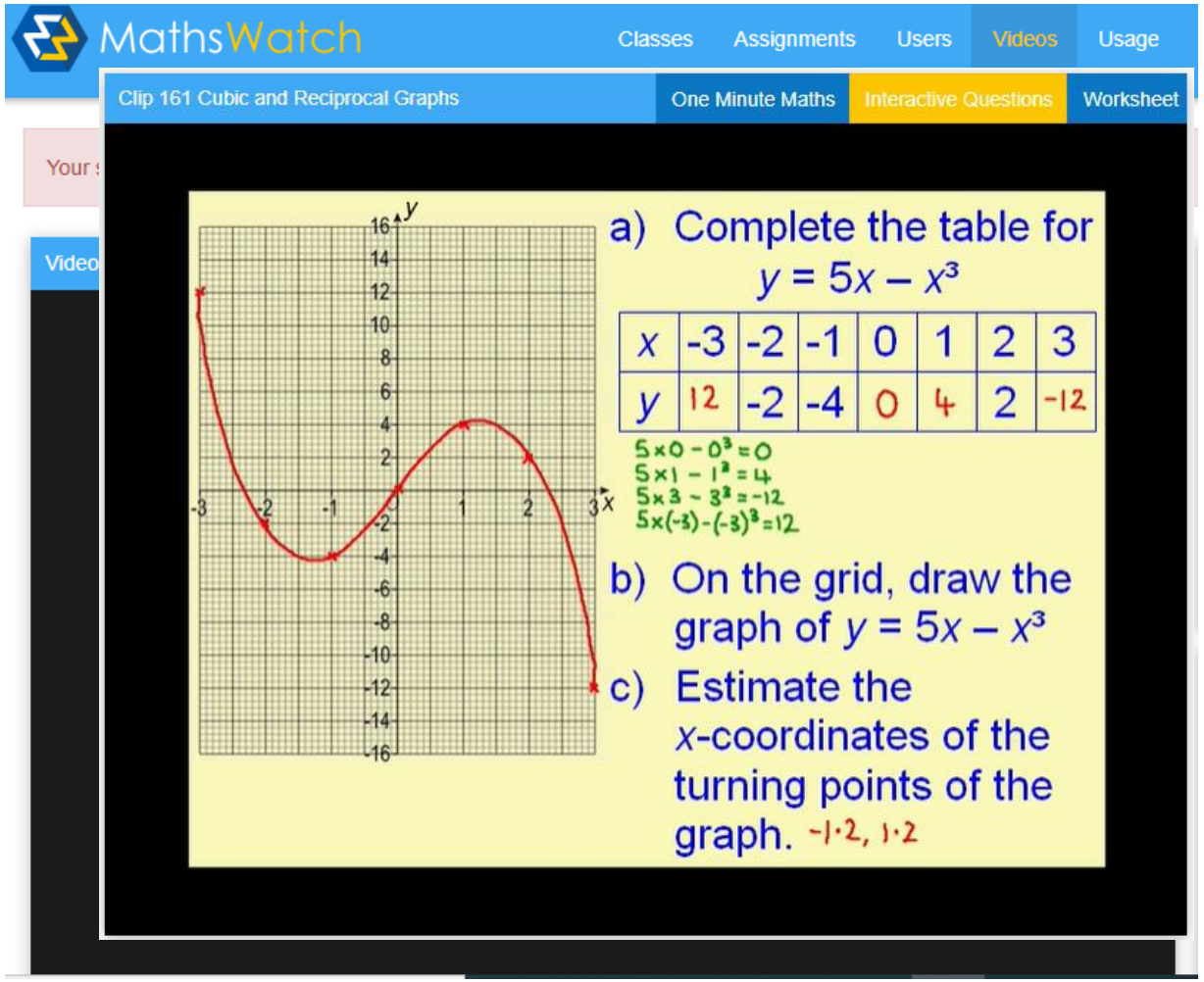
1. Revise

Our Preferred Maths Revision Website

www.mathswatch.co.uk

All the maths teachers at Soar Valley will use this site to tailor work for your revision.

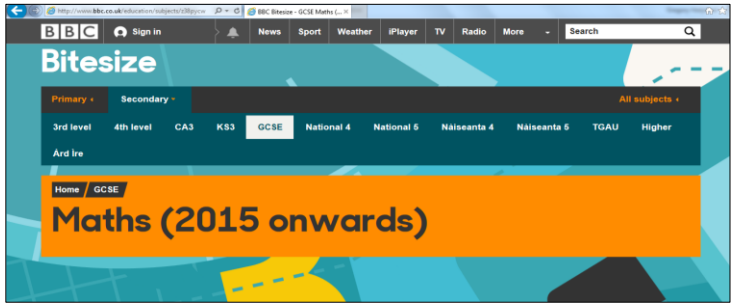
Make sure you know how To access this site.

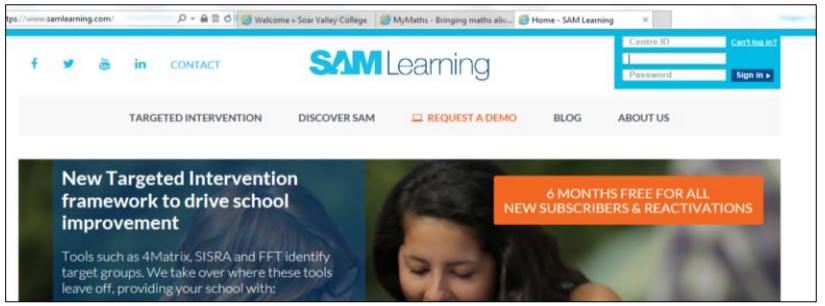


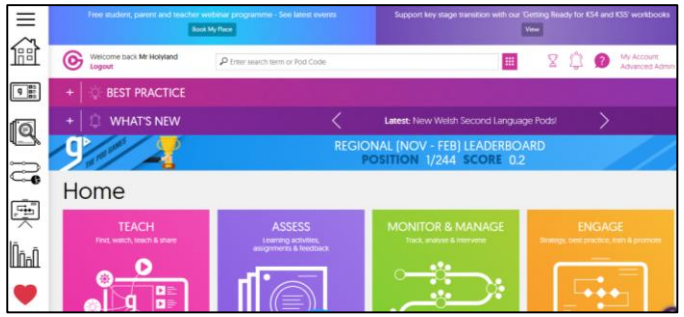
Other Maths Revision sites

1. Revise

www.mymaths.co.uk
Username: soarvalley
Password: enjoy







Bitesize, samlearning, gcsepod, Corbettmaths, youtube, ….

2. Review

Students should reflect on all the revision work they do.

They should:

Mark, correct and make a record of topics they find difficult.
These can be reviewed using MathsWatch or with the help of maths teachers.

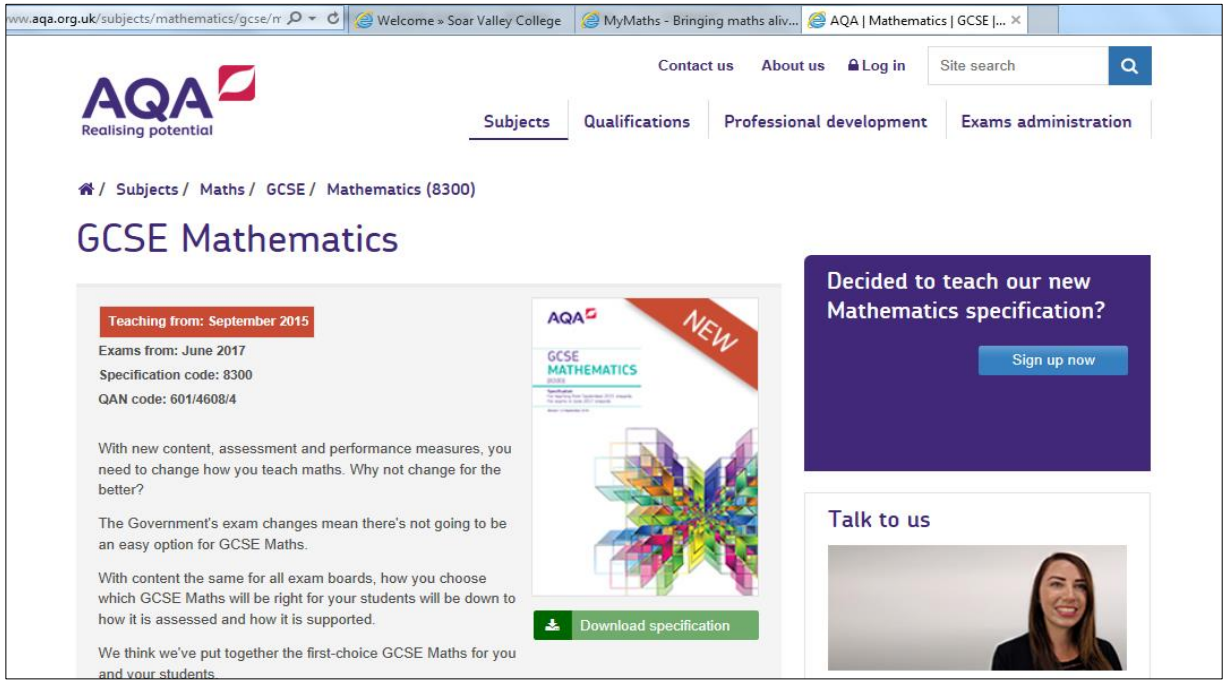
3. Rehearse

From January maths teachers will provide past papers to complete.

These are ESSENTIAL preparation for the GCSE!!

3. Rehearse

Our chosen exam board and syllabus is AQA GCSE Mathematics Code 8300



It has a comprehensive website with useful resources including Past Exam Papers.

Maths Genie is also another website for past papers

model answers included

www.aqa.org.uk/maths/gcse

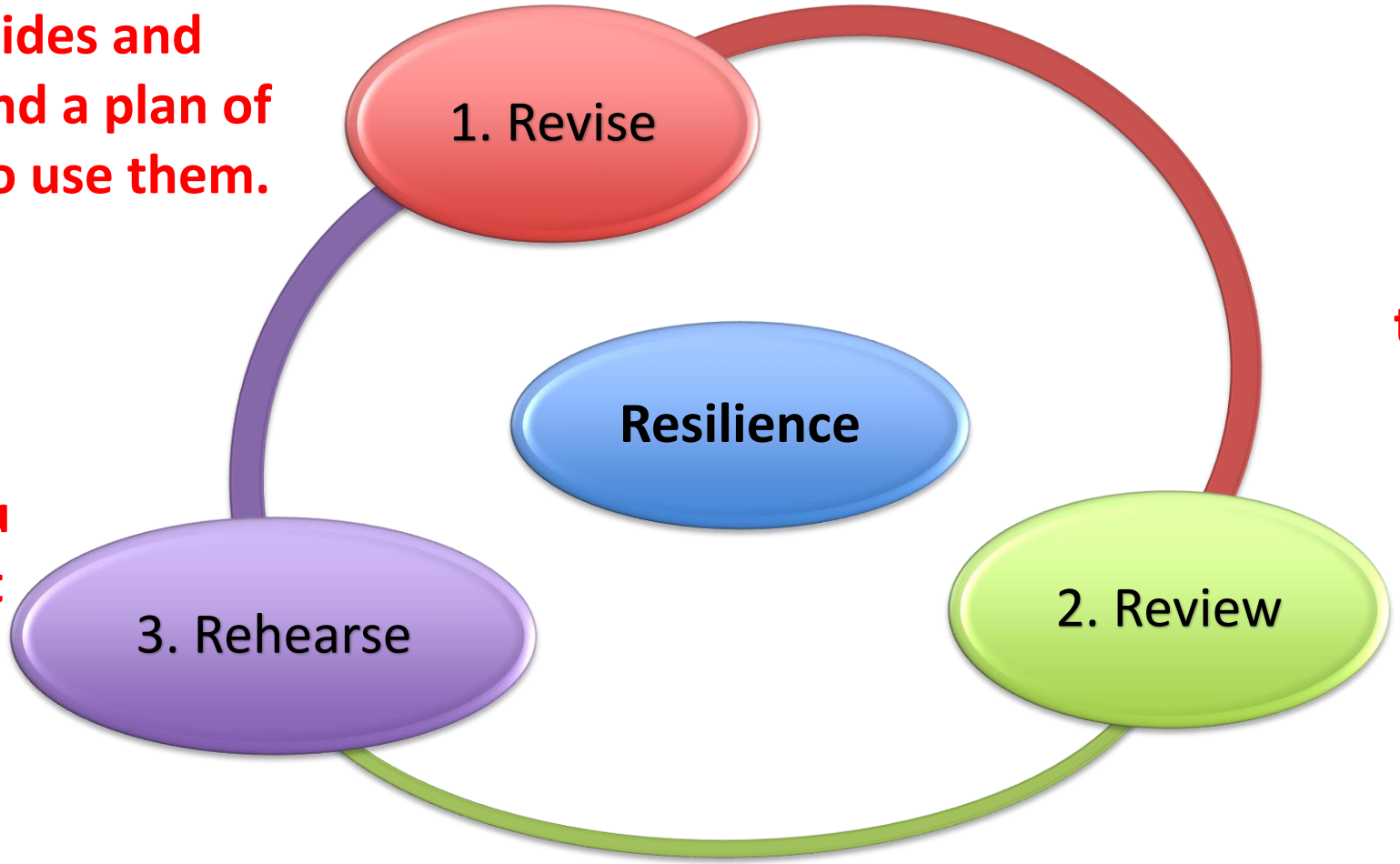
Resilience

Revision for maths takes TIME

Mistakes are part of revising and help students to progress.

Encourage regular practice

Make sure you have access to Revision guides and "Mathswatch" and a plan of how and when to use them.



Make sure all the work is marked and there is a list of the topics you would like to improve. Make sure you review your "mock exams".

Make sure you complete past papers

GCSE Science

Information for Parents

GCSE Science Course

AQA Realising potential

The Exams

Six papers:
2 Biology
2 Chemistry
2 Physics

Duration:
All exam papers are 1 hour and 15 minutes.
Triple science 1 hour 45 minutes

Revising Science

Knowledge

kerboodle

gcsepod an access company

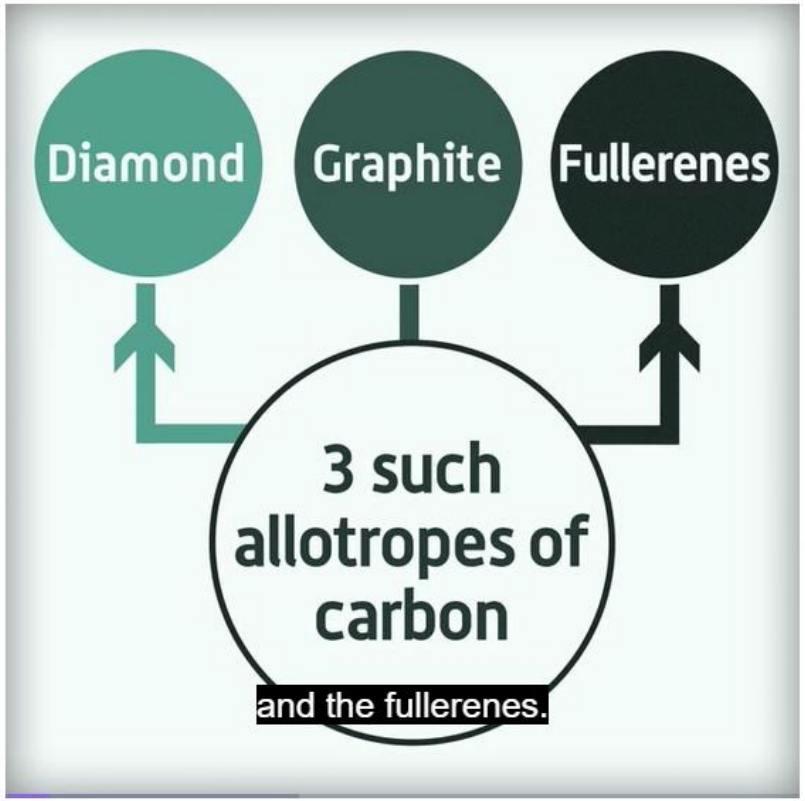
OAK NATIONAL ACADEMY

BBC Bitesize

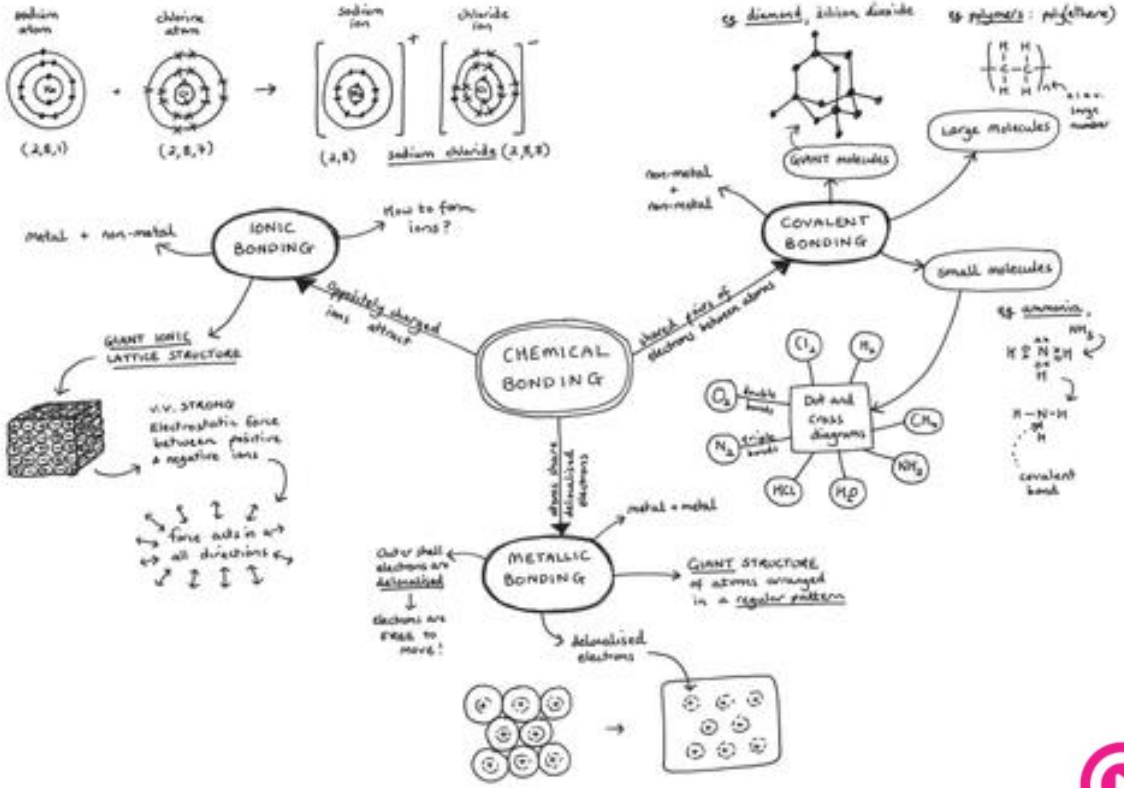
- Workbooks
- Knowledge organisers

Revision strategy

Knowledge



Retrieval



gcsepod
an access company

Contents

Knowledge Retrieval Practice

Shade in each level of the circle as you feel more confident and ready for your exam.

For answers and more practice questions visit www.oxfordrevise.com/scienceanswers

Even more practice and interactive revision quizzes are available on kerboodle

Knowledge: The key subject specific content. Use the checklists which will be given out to students

Retrieval: Self testing, checking that they know where the gaps are

Practice: Regular application of the knowledge to exam questions

Knowledge

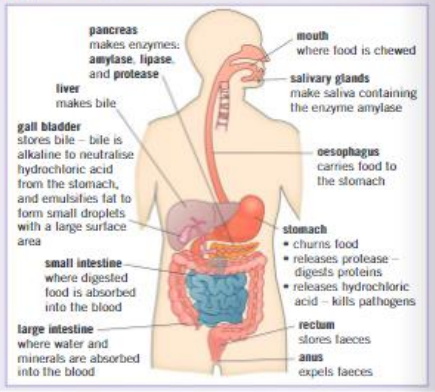
B4

B4 Organisation in animals

There are five **levels of organisation** in living organisms:

- **cells** – basic building blocks
- **tissues** – groups of cells that have similar structures and functions
- **organs** – groups of tissues working together to perform a specific function
- **organ systems** – groups of organs working together
- **organisms** – organ systems working together

Digestive system

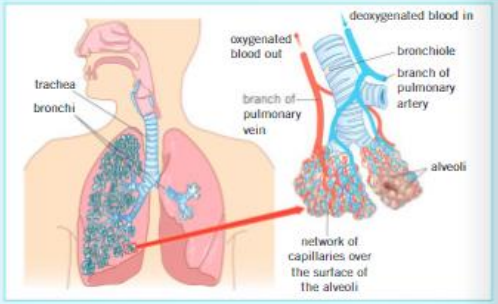


Lungs

When breathing in, air moves

1. into the body through the mouth and nose
2. down the trachea
3. into the **bronchi**
4. through the **bronchioles**
5. into the **alveoli** (air sacs).

Oxygen then diffuses into the blood in the network of **capillaries** over the surface of the alveoli.



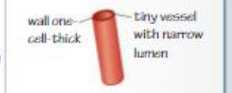
The circulatory system

Blood is a tissue made up of four main components

- red blood cells – bind to oxygen and transport it around the body
- **plasma** – transports substances and blood cells around the body
- **platelets** – form blood clots to create barriers to infections
- white blood cells – part of the immune system to defend the body against pathogens

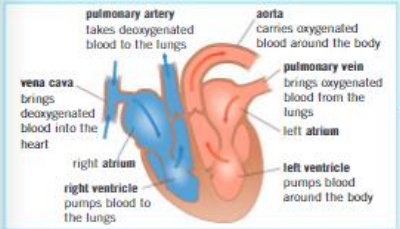
Blood vessels

The structure of each blood vessel relates to its function.

Vessel	Function	Structure	Diagram
artery	• carries blood *away from* the heart • under high pressure	• thick, muscular, and elastic walls • the walls can stretch and withstand high pressure • small lumen	
vein	• carries blood *to* the heart • under low pressure	• have valves to stop blood flowing the wrong way • thin walls • large lumen	
capillary	• carries blood to tissues and cells • connects arteries and veins	• one-cell-thick – short diffusion distance for substances to move between the blood and tissues (e.g., oxygen into cells and carbon dioxide out) • very narrow lumen	

The heart

The heart is the organ that pumps blood around your body. It is made from **cardiac muscle** tissue, which is supplied with oxygen by the **coronary artery**.



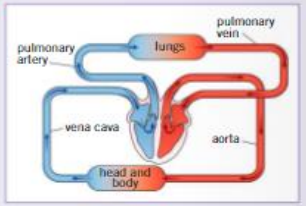
Heart rate is controlled by a group of cells in the right atrium that generate electrical impulses, acting as a pacemaker.

Artificial pacemakers can be used to control irregular heartbeats.

Double circulatory system

The human circulatory system is described as a **double circulatory system** because blood passes through the heart twice for every circuit around the body:

- the right ventricle pumps blood to the lungs where gas exchange takes place
- the left ventricle pumps blood around the rest of the body.



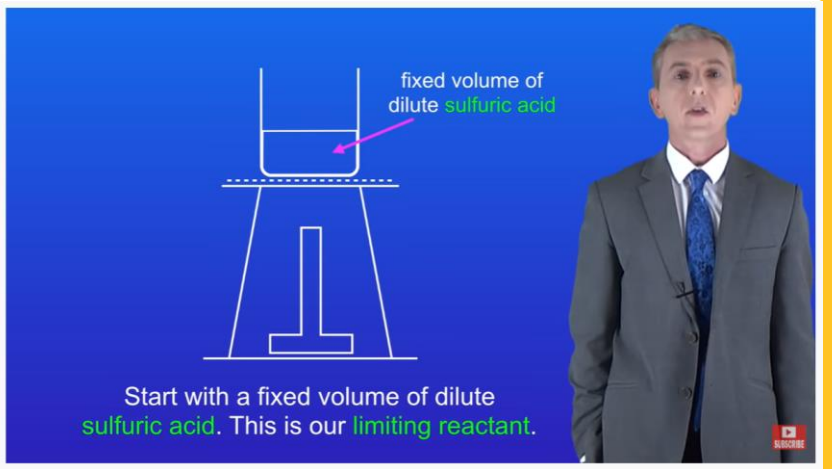
Key terms – Make sure you can write a definition for these key terms.

alveoli, amylase, aorta, artery, atrium, bronchi, bronchiole, capillary, cardiac muscle, coronary artery, double circulatory system, lipase, organ, organ system, plasma, platelet, protease, pulmonary artery, pulmonary vein, tissue, vein, vena cava, ventricle

Knowledge:

1. Use the subject specific revision guides

MyGCSE Science great for practical work



Retrieval

Learn the answers to the questions below, then cover the answers column with a piece of paper and write as many as you can. Check and repeat.

B4 questions	Answers
1 Name the five levels of organisation in living organisms.	cells → tissues → organs → organ systems → organisms
2 What is a tissue?	a group of cells with similar structures and functions
3 What is an organ?	a group of tissues working together to perform a specific function
4 What is the function of bile in digestion?	neutralise hydrochloric acid from the stomach and emulsify fat to form small droplets with a large surface area
5 What is the function of saliva in digestion?	lubrication to help swallowing – contains amylase to break down starch
6 Name three enzymes produced in the pancreas.	amylase, protease, lipase
7 Name the four main components of blood.	red blood cells, white blood cells, plasma, platelets
8 What is the function of platelets?	form blood clots – prevent the loss of blood and stop wounds becoming infected
9 Name the substances transported in the blood plasma.	hormones, proteins, urea, carbon dioxide, glucose
10 Why is the human circulatory system described as a double circulatory system?	blood passes through the heart twice for every circuit around the body – deoxygenated blood is pumped from the right side of the heart to the lungs, and the oxygenated blood that returns from the lungs is pumped from the left side of the heart to the body
11 How does the structure of an artery relate to its function?	carries blood away from the heart under high pressure – has a small lumen and thick, elasticated walls that can stretch
12 How does the structure of a vein relate to its function?	carries blood back to the heart at low pressure – doesn't need thick, elasticated walls, but has valves to prevent blood flowing the wrong way
13 How does the structure of a capillary relate to its function?	carries blood to cells and tissues – has a one-cell-thick wall to provide a short diffusion distance
14 List the structures air passes through when breathing in.	mouth/nose → trachea → bronchi → bronchioles → alveoli

Now go back and use the questions below to check your knowledge from previous chapters.

Previous questions	Answers
1 What is the purpose of active transport in the small intestine?	sugars can be absorbed when the concentration of the sugar in the small intestine is lower than the concentration of the sugar in the blood
2 What is therapeutic cloning?	patient's cells are used to create an early embryo clone of themselves – stem cells from the embryo can then be used to treat the patient's medical conditions
3 What is a stem cell?	undifferentiated cell that can differentiate into one or more specialised cell types
4 Give one disadvantage of using plant meristems to clone plants.	no genetic variation, so, for example, an entire cloned crop could be destroyed by a disease
5 What is active transport?	movement of particles against a concentration gradient – from a dilute solution to a more concentrated solution – using energy from respiration

Required practical skills

Practise answering questions on the required practicals using the example below. You need to be able to apply your skills and knowledge to other practicals too.

Food tests

There are different ways to test for different compounds found in food:

- ethanol test for lipids (fats) – colour change from colourless to cloudy white if present
- Benedict's test for sugars – colour change from blue to red if present
- iodine test for starch (carbohydrates) – colour change from brown to blue-black if present
- Biuret reagent test for protein – colour change from blue to purple if present.

You need to be able to identify and describe the correct method, and results, for each test.

Worked example

A student wanted to test a sample for the presence of protein using Biuret reagent. Write a risk assessment for this activity.

1 Write down general safety practices in labs:
- wear goggles to protect your eyes
- wash hands at the end of the practical
- clear up any spills quickly
- do not eat any of the food.

2 Write down what things could hurt you in the practical, and how they could hurt you:
- Biuret reagent – irritant
- glass – can break
- pipette – can poke you in the eyes.

3 Write down how you can prevent these hurting you:
- wash hands after touching Biuret reagent, and if it is ingested or it gets into the eyes inform a teacher immediately
- if glass is broken inform a teacher immediately
- point pipettes downwards.

Practice

1 A student picked up solution A and added it to a sample of food. Solution A was blue and turned purple after adding it to the food.

Name solution A and identify the food type present in the sample.

2 Benedict's test for sugar requires the solution to be heated. One way to do this is by heating the test tube in a beaker of water using a Bunsen burner.

Give an alternative method of heating the solution.

3 When testing a sample for protein in a test tube, a student found that the top of the sample tested positive whereas the bottom did not.

Give a reason for this result.

Retrieval

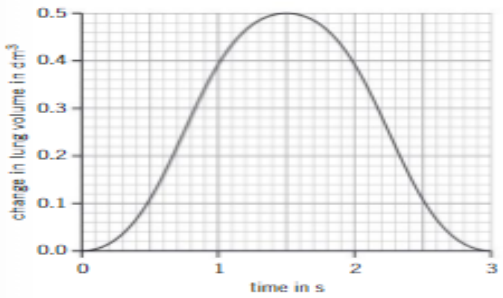
What can they remember without prompts?

Practice

Exam-style questions

01 An athlete's lung volume was measured over a period of time. The data for one respiratory cycle is shown in **Figure 1**.

Figure 1



01.1 Describe how the athlete's lung volume changes over the three-second period shown. **[2 marks]**

Exam Tip
For this question you need to use the data and describe the shape of the line and how it changes.

01.2 Use **Figure 1** to determine the volume of air taken in when the athlete inhales. **[1 mark]**

_____ dm³

01.3 The athlete's total lung volume before inhalation was 5.00 dm³.
Calculate their total lung volume after inhalation. **[2 marks]**

_____ dm³

01.4 Calculate how many respiratory cycles will take place in 60 s. **[3 marks]**

_____ cycles

01.5 Select which of the following changes take place in the athlete's chest cavity between 0 and 1.5 s. **[2 marks]**
Tick **two** boxes.

- rib cage moves in and down ☐
- rib cage moves up and out ☐
- diaphragm contracts and moves down ☐
- diaphragm relaxes and moves up ☐

Exam Tip
Read the question carefully, **01.5** only refers to the first part of the graph not all of it.

02 A student carried out a number of food tests on an unknown sample.
Their results are shown in **Table 1**.

Table 1

Nutrient tested for	Reagent used	Result
starch	**Y**	yellow–orange
sugar	Benedict's solution	blue
protein	Biuret reagent	purple
X	ethanol	cloudy white layer formed

Exam Tip
A reagent is a chemical or solution that is used in a practical.

02.1 Identify nutrient **X** that is detected by adding ethanol to the food sample. **[1 mark]**

02.2 Identify reagent **Y** that is used to test a food sample for starch. **[1 mark]**

02.3 Biuret reagent is corrosive.
Suggest **one** safety precaution that the student should have taken when using Biuret reagent. **[1 mark]**

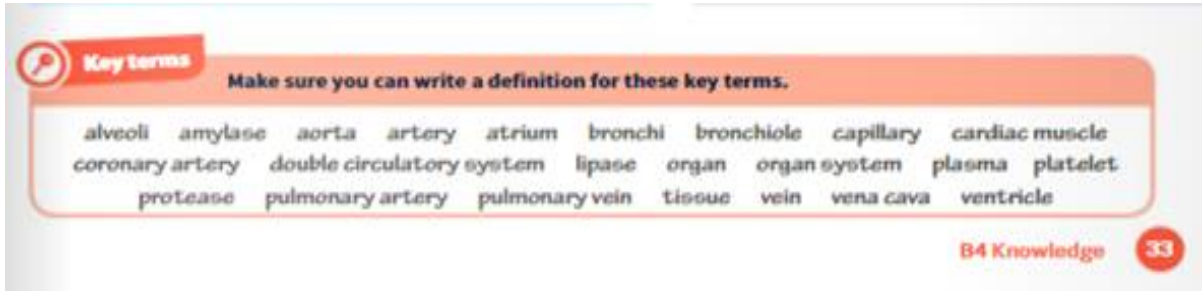
Exam Tip
Make sure your suggestion is related to the practical.

02.4 The student thought that the food sample contained starch, sugar and protein. Is the student correct?
Circle **one** answer for each of the statements below. **[3 marks]**

The food sample contains starch.	yes	no
The food sample contains sugar.	yes	no
The food sample contains protein.	yes	no

Scientific language

- **Over** 3700 subject specific words students should be able to define.



- Working scientifically vocabulary such as variables, accuracy, reliable, conclusion, precision, evaluation etc.

Command words

Command words are the words and phrases used in exams that tell students how they should answer a question.

Most common: Describe, Explain, Compare, Define, Evaluate, Justify, suggest……..

(f) Describe the process of evolution by which some plants survive in fields where animals eat the plants.

Response requires one of these 3:

- Statement of facts
- Statement of observations
- Outlining a process

(4)

(b) Scientists have genetically engineered a variety of wheat to be resistant to herbicides.

The herbicide resistant variety of wheat will give a higher yield than the non-herbicide resistant variety.

Explain why.

Response requires:

- Giving reasons how or why something has happened
- Giving reasons how or why 2 factors are related
- Giving reasons how or why a process works

(3)