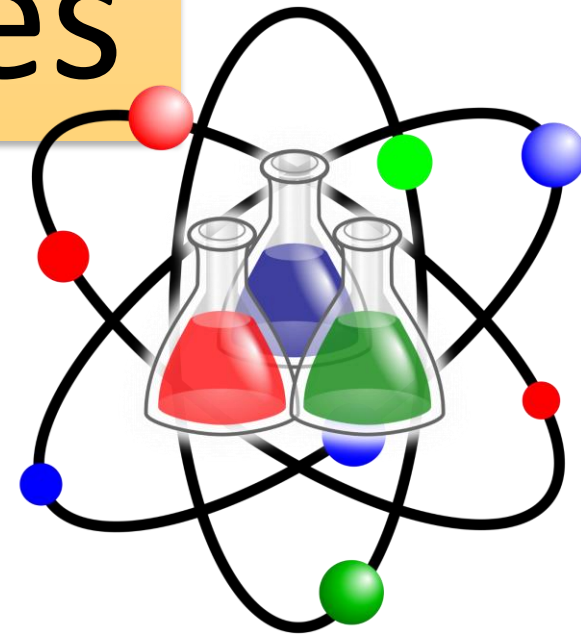


Specific tips to
help with Science!

Science Exam Revision Techniques



To put it in context!!!!

Regardless of which science course you are following Triple or Combined you have a lot of information to remember 40% of your exam marks are based on your recollection of the information you have been taught

40% of your marks are from your ability to use the knowledge you have to answer questions that may be in a novel or unusual context.

Knowing the command words for your science papers are really important, knowing what the questions are asking you to do is important - a list of the command words and their meanings can also be found on the AQA website.

The Final 20% is based on your knowledge of the required practical activities you have covered and you working scientifically skills.

Top Tips

- Find a suitable environment away from distractions – should be without headphones, TV and music!



- Prevent social media use in revision time.
- Encourage repetition of harder topics.
- Sleep is important – they should be aiming for 9-10 hours a night, especially during the exam period.



Useful Websites

- Check they are for the correct exam board.
- AQA Combined Science Trilogy
- Or
- AQA Biology/Chemistry/Physics
- <https://www.bbc.co.uk/bitesize/levels/z98jmp3>
- <https://theeverlearner.com/>
- <https://senecalearning.com/en-GB/>
- <https://www.khanacademy.org/>
- <https://www.docbrown.info/>
- <https://s-cool.co.uk/gcse>
- <https://www.aqa.org.uk/subjects/science/gcse>

A note on “The Everlearner”

All year 11 students have been issued with an Everlearner account. To log on use the link on the previous slide to go to the everlearner site.

This is a powerful revision tool and will prove very helpful.

The students school email address is their username. Each student received an email around the 14th June 2020 containing their password. If they cant retrieve this or have forgotten their password there is a forgotten password link on the log in screen which will send a reset email to their school email address.

Once logged in students can access the courses they have been assigned.

For assistance in how to use the everlearner platform for revision purposes please click on this link

<https://help.theeverlearner.com/knowledge/learners>

Flash Cards

- Use small pieces of card or paper to make concise notes on a topic.

Small topics work best.

Keep notes brief.

Use colour for key words.

Combustion


- reacting a hydrocarbon (HC) with oxygen.

① complete
 $HC + O_2 \rightarrow CO_2 + H_2O$

② incomplete
 $HC + O_2 \rightarrow CO + C + H_2O$

toxic to humans

soot

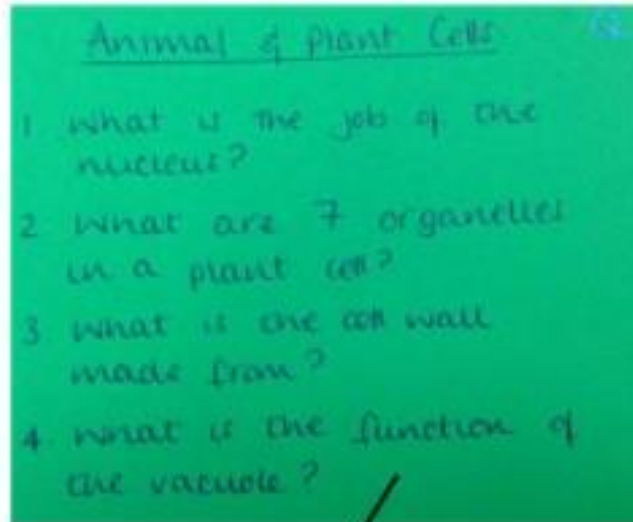


The diagram shows two candle flames. The top one is blue and labeled 'blue'. The bottom one is yellow and labeled 'yellow'. Arrows point from the text 'blue' and 'yellow' to their respective flames.

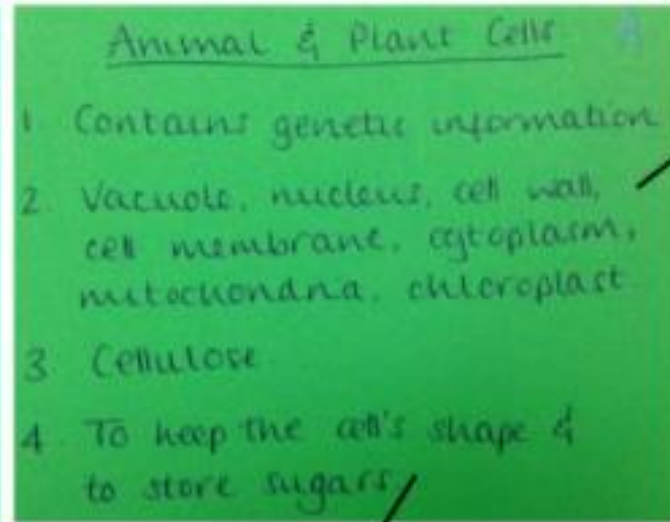
Using diagrams makes abstract content easier.

Q&A Cards

- Use small pieces of card or paper to write questions on a particular topic. The answer should be written on the other side.

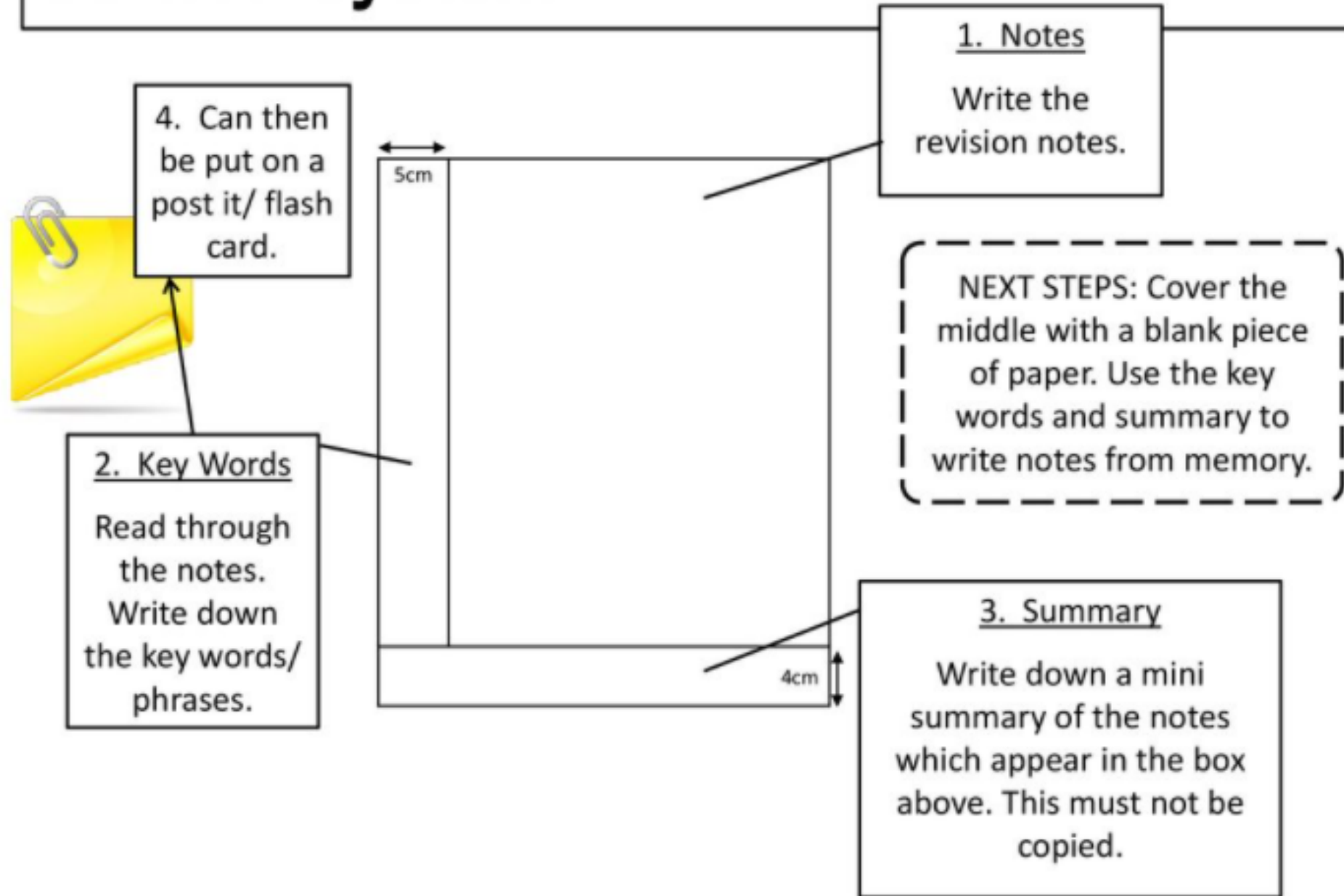


Keep simple.
Cover the areas that you are less confident with.



Check answers by flipping over cards and repeat as much as possible.

Cornell System



Mind Maps

Mind map

Generate using short sharp sentences, key words and diagrams.

Learn it

Place the mind map in a prominent place.

Cover it

Cover the mind map with a blank sheet of paper try to redraw it.

Compare it

Compare the new mind map with the original – the difference between the two is what needs to be learnt.



AQA Past Exam Papers

- Many past exam papers and their mark schemes available online.

Can get there straight from a search engine.

OR

AQA: <http://www.aqa.org.uk/exams-administration/exams-guidance/find-past-papers-and-mark-schemes>

The screenshot shows the AQA website interface. At the top left is the AQA logo with the tagline 'Nothing potential'. Navigation links include 'Home', 'About us', 'Log in', and 'Site search'. A secondary navigation bar contains 'Subjects', 'Qualifications', 'Professional development', and 'Exams'. The main content area is titled 'Find past papers and mark schemes' and includes a search form with dropdown menus for 'Subject', 'Qualification', 'Specification', and 'Series'. A sidebar on the left lists various exam-related categories like 'Dates and timetables', 'Exams', 'Assessments', 'Exams administration', 'Exams arrangements', 'Special considerations', 'Exams guidance', 'Exam papers and materials', and 'Examiner guides'.

IDEAS:

- Complete in one colour without notes and in timed conditions, and in another colour using notes.
- Complete all in pencil, mark, rub out, and complete again.
- Complete the exam "closed book" (using no notes) and in the time period allowed.
- Focus on weaker areas, as a whole exam paper can be daunting.

These are some of the common errors made by students when answering Science exam papers

.....

- Questions left blank.
- Instructions not read
e.g. tick TWO boxes, student only ticks one
describe “.....”, student tries to explain it
- Formulas not learned.
- Working out not shown – lost marks!
- Long answers not planned – jumbled up, not in logical order.
- BASIC IDEAS not learned e.g. mass / atomic number; photosynthesis/respiration.
- Percentages not calculated correctly (what is 72 as a % of 148?).
- Graph scales not read carefully (1 big square = 50 so what is each little square?).

The Questions on your exam papers are designed in a specific way – known as “Sawtooth”

There is a ramp in each question, i.e. each question will become more challenging as you go through it.

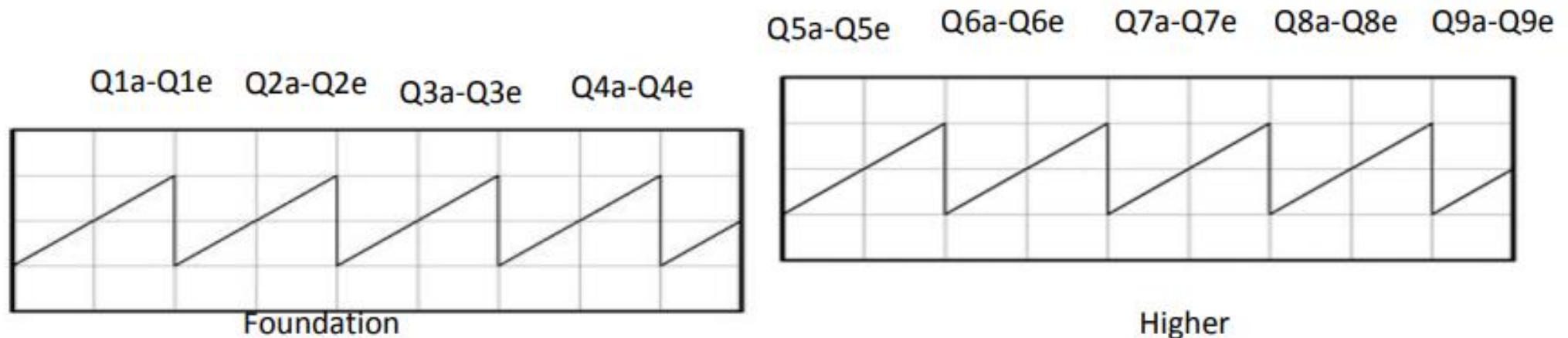
The first question will usually be fairly easy right through,

but then

each question starts off easy, then ends up being more challenging

then

the next question starts off easy again



Advice

Attempt EVERY question

READ the information at the **START** of the question **BEFORE** starting to answer, you will need it!

Q3.

Read the information about stem cells.

Stem cells are used to treat some human diseases.

Stem cells can be collected from early embryos. These stem cells have not begun to differentiate, so they could be used to produce any kind of cell, tissue or organ.

The use of embryonic stem cells to treat human diseases is new and, for some diseases, trials on patients are happening now.

Stem cells can also be collected from adult bone marrow. The operation is simple but may be painful. Stem cells in bone marrow mainly differentiate to form blood cells. These stem cells have been used successfully for many years to treat some kinds of blood disease. Recently there have been trials of other types of stem cell from bone marrow. These stem cells are used to treat diseases such as heart disease.

Evaluate the use of stem cells from embryos or from adult bone marrow for treating human diseases. You should give a conclusion to your evaluation.

(Total 5 marks)

You need to make sure you read all of the information in **GREEN** before you attempt the question in **YELLOW**.

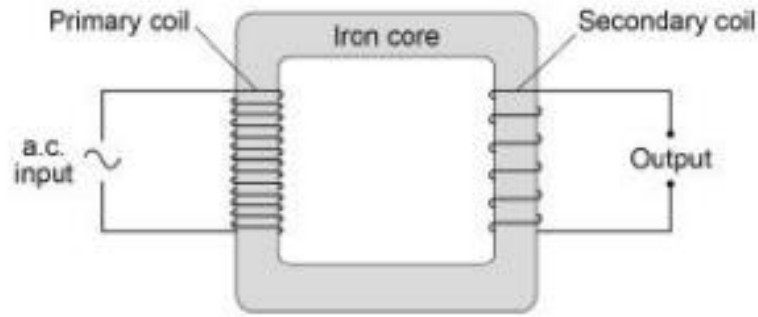
Be prepared to leave a question partly finished and then come back to it.

NEVER leave blank a MULTIPLE CHOICE or LINK BOX QUESTION

0 6

Figure 12 shows the construction of a simple transformer.

Figure 12



5 . 1

Draw **one** line from each symbol to the name of the component.

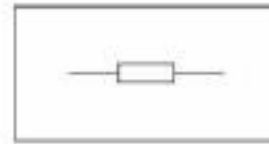
[3 marks]

Standard symbol

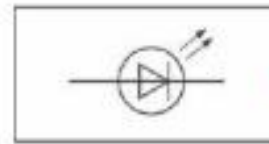
Name of component



Battery



Switch



Lamp

Resistor

LED

[1 mark]

0 6

1 Why is iron a suitable material for the core of a transformer?

Tick one box.

It is a metal.

It will not get hot.

It is easily magnetised.

It is an electrical conductor.



Nor a SENTENCE COMPLETION question...

carbon dioxide	excretion	nitrogen
oxygen	photosynthesis	respiration

The increase in the area of forest lost has caused an increase in the gas _____.

The increase of this gas has been caused because less of the gas is being absorbed by plants for the process of _____.

Nor a PICK FROM A TABLE question...

Alcohol	Formula	Melting point in °C	Boiling point in °C
Methanol	CH ₃ OH	-94	65
Ethanol	CH ₃ CH ₂ OH	-118	78
Propanol	CH ₃ CH ₂ CH ₂ OH	-129	97
Butanol	CH ₃ CH ₂ CH ₂ CH ₂ OH	-89	118

. Which alcohol in Table 2 is liquid over the greatest temperature range?

[1 mark]