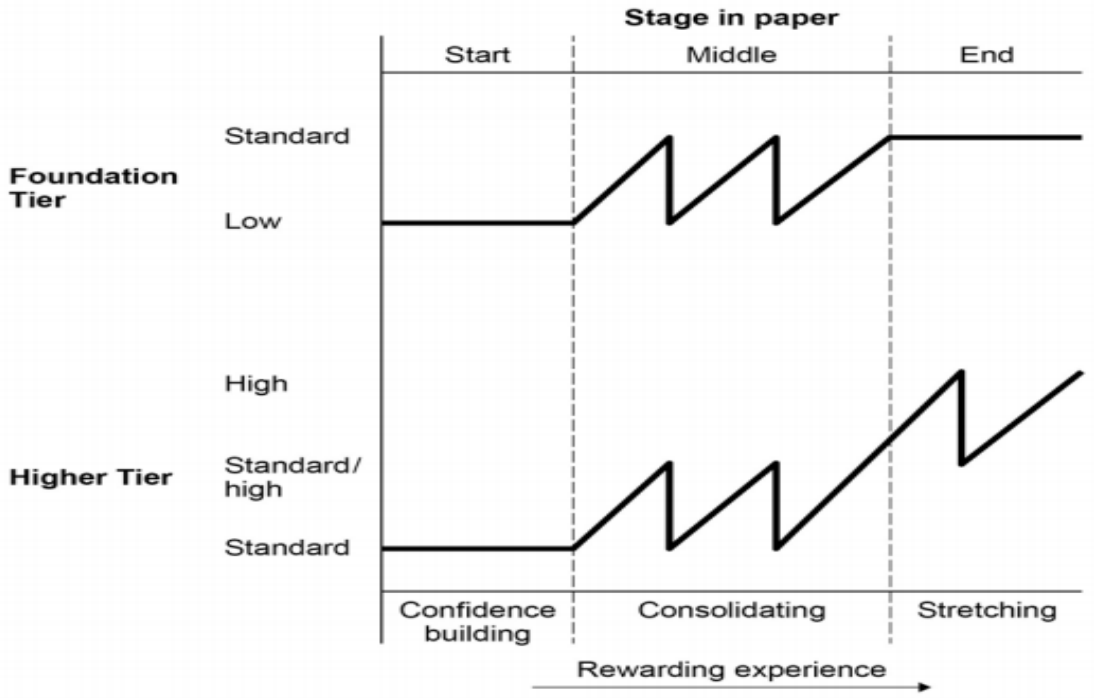
Science GCSE

E-ACT Ousedale School

Be Kind | Work Hard | Succeed Together

The exam paper

- At home, encourage them to make it all the way to the end of the paper and not give up if they struggle with half of each question as they all start off easy and build.



- Annotate the question, use the blank space to plan and identify key words to help with their response

- Examiner makes it hard by: changing the context, requiring more precise terminology, rounding up, using standard form

Biggest problems students have in science…

- Sheer amount of content – Break this down into 30 min sessions 5x a week.

It is easy to keep revising the things we already know. Encourage new learning, this is how we make progress

- Extended writing – Plan your answer
- Remembering required practicals – Watch them online and make a mind map / notes
- Numeracy and graph questions

Large amount of content

Examine the section of the specification and RAG rate each of the sub-sections.

Specification Point	R	A	G
The elements in the periodic table are arranged in order of atomic (proton) number and so that elements with similar properties are in columns, known as groups. The table is called a periodic table because similar properties occur at regular intervals. Elements in the same group in the periodic table have the same number of electrons in their outer shell (outer electrons) and this gives them similar chemical properties.			
Students should be able to: • explain how the position of an element in the periodic table is related to the arrangement of electrons in its atoms and hence to its atomic number • predict possible reactions and probable reactivity of elements from their positions in the periodic table.			
Before the discovery of protons, neutrons and electrons, scientists attempted to classify the elements by arranging them in order of their atomic weights. The early periodic tables were incomplete and some elements were placed in inappropriate groups if the strict order of atomic weights was followed.			

Red - I am completely unsure about this section of the specification

Amber - I know about this and think I can apply this knowledge.

Green - I am confident that I can apply this knowledge

Activity

Parents: Support students by asking them to explain a section they have rated green and make sure they are reviewing those topics that they have difficulty with.

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"So what word describes the work done in a given time and what units is it measured in?"

"I can see you have struggled with this topic, what have you done to rectify that?"

6 mark questions

- Often students just write down everything they know about the topic.

Decode

- Highlight the key word to identify the command word and topic that the question is in. Look back at previous question.

Plan

- Plan the key words to include, flow diagram of practical steps or annotate the trends in a table or graph.

Respond

- Write a paragraph that includes at least a point and reason multiple times. Use **linking** e.g. because, and so, therefore.

Required Practical

- ❑ Revise the required practical's, including watching YouTube clips and learning HSW key word words.
- ❑ 15% of every paper will contain questions related to the required practical tasks they have completed over the two years.
- ❑ What to revise:

  Variables

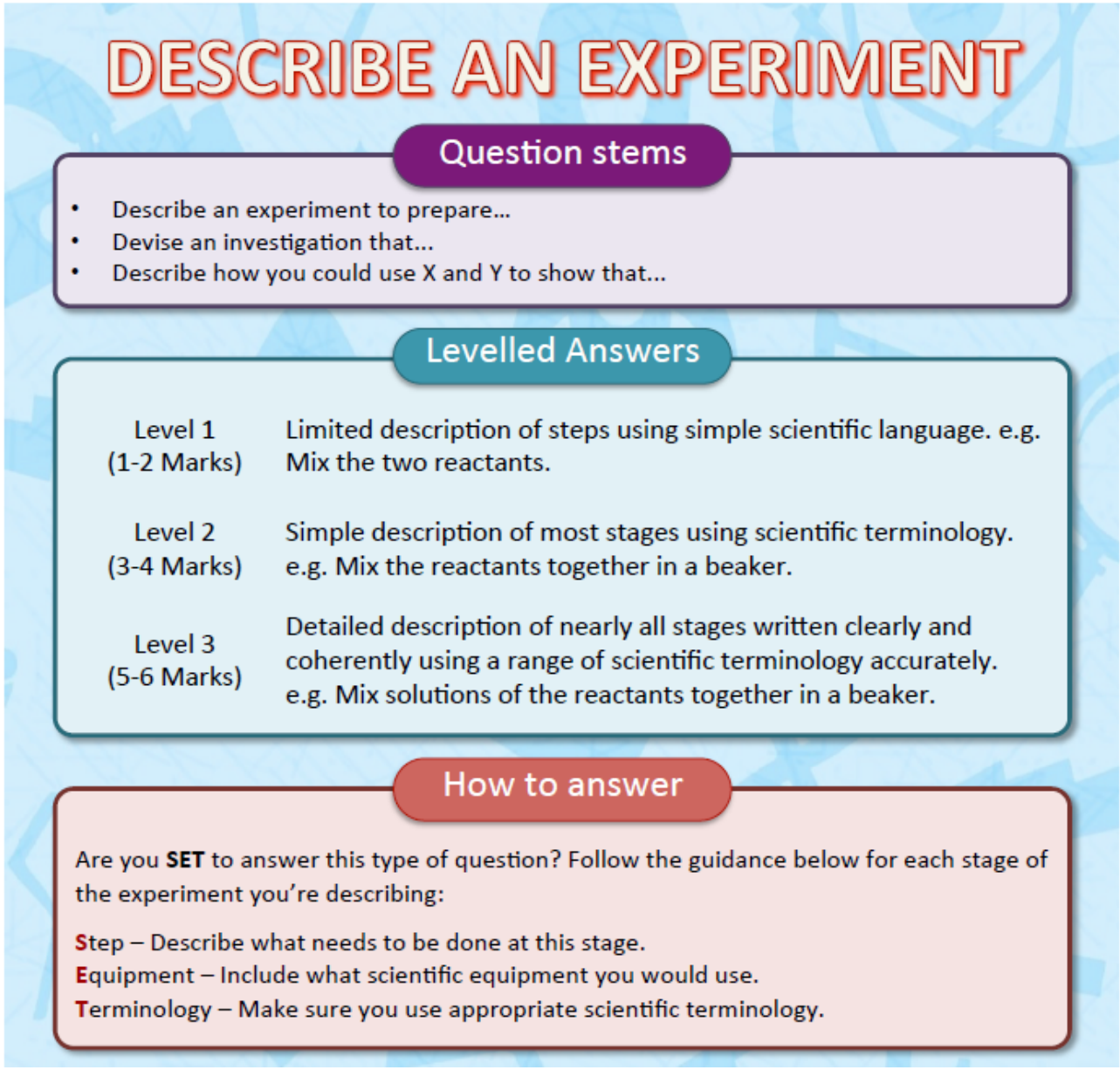
  Data presentation and Analysis

  How to make the practical reliable, precise and accurate

  Drawing a conclusion

  Evaluating the practical method.

Memorise some model answers / mark schemes



Mark schemes

- Remember to get the marks it is all about precision and detail.

- We encourage students to us mark schemes to help, make cards/posters about a key concept including all the key words, statements that you can use and all those that you shouldn't use.

Maths in science

20 + formula across the 2 papers to memorise.

Not all of them are on the equation sheet e.g. Chemistry

The issue

- *Fewer candidates gained the marks in the questions requiring them to recall equations. This year all students need to know the units.*
- *Often when an equation had been recalled the student was then unable to rearrange it so that an answer could be calculated correctly. Students are advised to use the triangle method.*
- *The concept of significant figures was not well understood.*
- *Only 15% of candidates gained the mark requiring the use of standard form.*

Exam technique - how you can reinforce our message at home the night before.

- Use the specification sheets and checklists that have been shared on Teams to help your child realise what their strengths and weaknesses are and then help them write a revision plan.
- Practice topic papers are being loaded on to Teams & available from the AQA website. Papers are also being used in the lesson and students will take them home.
- Help them to read questions carefully, highlight the command words & know what the question means.
- Encourage them to attempt the 6 mark questions.
- Read, Identify, Command words, Key words.

Exam preparation

Invest time in knowledge enhancement

SENECA
Learn better, faster, free.

Cells

All living organisms are made up of cells. Cells are the basic unit of living organisms. provide structure and carry out certain functions. There are two different types of cell:

Eukaryotic cells

- Eukaryotic cells are found in plants, animals, fungi and protists (single-celled organisms that don't fit other categories).
- A eukaryotic cell is 10 - 100 micrometres in size.
- A eukaryote is an organism made up of eukaryotic cells.

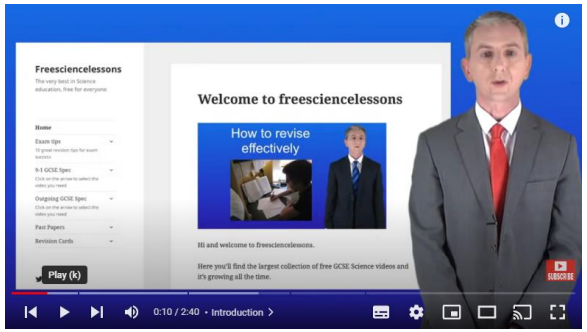
Prokaryotic cells

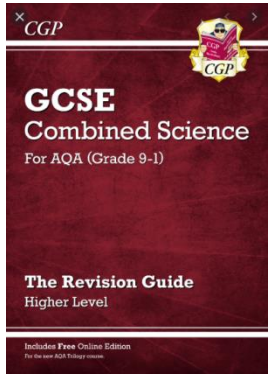
- Prokaryotic cells are 0.1 - 5.0 micrometres in size.
- A prokaryote is an organism made up of prokarya
- Bacteria are prokaryotes.

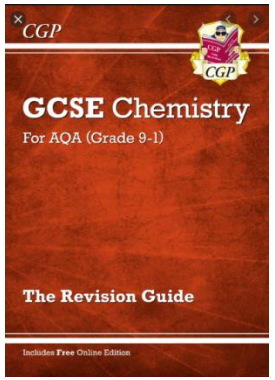
Study ▷

Support with content / terminology

- ❑ Session 6
- ❑ YouTube – video tutorials
- ❑ CGP Revision guides
- ❑ Past papers







Session 6 timetable Newport

Revision sessions are on-going:

- ❑ Biology Wednesday after school
- ❑ Chemistry Tuesday after school
- ❑ Physics Thursday after school
- ❑ Combined Science Tuesday after school