REVISING FOR SCIENCE

Year 11

Key information

- **2 papers per specialism: Paper 1 and 2 Biology/ Paper 1 and 2 Chemistry/ Paper 1 and 2 Physics**

<u>Paper 1 topics</u>
Physics:
Energy
Electricity
Particle model of matter
Atomic structure
Chemistry:
Atomic structure and the periodic table
Bonding, structure, and the properties of matter
Quantitative chemistry
Chemical changes
Energy changes
Biology:
Cell Biology
Organisation
Infection & Response
Bioenergetics

<u>Paper 2 topics</u>
Physics:
Forces
Waves
Magnetism and electromagnetism
Space physics (triple physics only)
Chemistry:
The rate and extent of chemical change
Organic chemistry
Chemical analysis
Chemistry of the atmosphere
Using resources
Biology:
Homeostasis & response
Inheritance, Variation & Evolution
Ecology

Useful websites

- KayScience: Revision videos with quizzes to test your knowledge (all pupils have an account)

- AQA past papers: https://www.aqa.org.uk/find-past-papers-and-mark-schemes

Should complete 1 paper every 2 weeks and track topics to cover before attempting a paper again (same or one from another year)

- Mini exam booklets: shared on Beehive (paper 2 as paper 1 was shared earlier this year)

- Monitored homework: Mind mapping and testing your recall regularly

- Seneca/Quizlet/Primrose kitten/Carousel learning

Key concepts and skills

- Graph skills
- Numeracy
- Tier 2/3 terminology
- Variables/data/understanding command words

Key terms

1. Precise

An instrument with smaller resolution (more sensitive measurement) will give more precise results or the measurements are in close agreement

2. Error

If you identify any odd results (often called **anomalies** or anomalous results)

This may be due to scale / value was misread or one of the variables were not controlled

3. Accurate

A measurement is accurate if it is close to the true value.

4. Repeatable

If a person did the same experiment again, in the same condition, the results would be the same

5. Reproducible

If someone else did the experiment and changed the equipment/method, the results will still be similar

6. Valid

If the results are repeatable and reproducible then the results are valid: they support the hypothesis (e.g fair)

Key terms to look out for

- Describe: What pattern do you see? Can you support your answer with data. BE EXPLICIT!
- Explain: Describe as above AND link to prior knowledge - use the knowledge from class to support your answer and explain why the pattern/trend is as it is.
- Evaluate: Comparing data (or information) using …er and …est terms e.g. high, higher, highest

Required practicals

- All required practicals can be found here:
- https://www.youtube.com/@MalmesburyEducation/featured

- Pupils can be tested on any aspect of the practical: set up, equipment, variables, method, data collected, pattern from data, how the results are presented and ways to improve

Final points

- Maths skills: pupils are expected to bring and use a calculator in exams. Mathematical questions could include calculating the mean/average, rearranging equations, ratios, median, mode, standard form, multi-step calculations, percentage change.

- Bullet points: for all 6 markers, pupils need organise their answers clearly in a logical order; bullet points should be used for any 6 marker question on any of the papers.

- Reading the question: highlight key terms you recognise in the question as this will help ease panic if you are unsure. Read the number of marks available (if 2 marks, tick 2 boxes or write 2 points). Never leave a question blank (always worth taking a guess)