

Welcome to A Level Biology!

AQA AS Biology (7401) A-level Biology (7402).



Course introduction – objectives.

- Know the topics you will study on the A-Level Biology course.
- Know the assessment objectives and their levels of difficulty.
- Understand how you will be assessed in the examinations at the end of the course.
- Know how mathematical and practical skills will be integrated into the course and how they will be assessed



There are 4 units in A Level Biology Year 1.

- 1. Biological molecules
- 2. Cells
- 3. How organisms exchange substances with their environment
- 4. Genetic information, variation and relationships between organisms

Plus you will carry out and learn six required practicals



There are 4 units in A Level Biology Year 2.

- 5. Energy transfers in and between organisms
- 6. Organisms respond to changes in their internal and external environment.
- 7. Genetics, populations, evolution and ecosystems
- 8. The control of gene expression

Plus six additional required practicals



There are 3 assessment objectives with increasing level of challenge.

AO1:

Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.

AO2:

Apply knowledge and understanding of scientific ideas, processes, techniques and procedures:

- in a theoretical context
- in a practical context
- when handling qualitative data
- when handling quantitative data

AO3:

Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to:

- make judgements and reach conclusions
- develop and refine practical design and procedures

You will be assessed by sitting 3 examination papers:

Assessments

Paper 1

What's assessed

 Any content from topics 1– 4, including relevant practical skills

Assessed

- · written exam: 2 hours
- 91 marks
- 35% of A-level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: extended response questions

Paper 2

What's assessed

 Any content from topics 5-8, including relevant practical skills

Assessed

+

- written exam: 2 hours
- 91 marks
- 35% of A-level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: comprehension question

+ Paper 3

What's assessed

 Any content from topics 1–8, including relevant practical skills

Assessed

- written exam: 2 hours
- 78 marks
- 30% of A-level

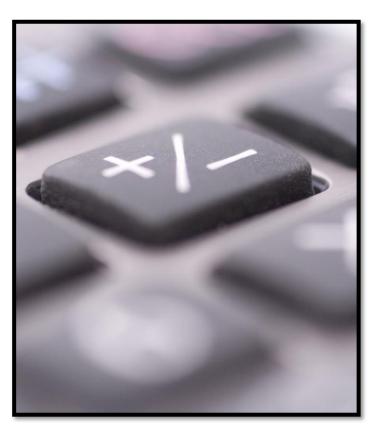
Questions

- 38 marks: structured questions, including practical techniques
- 15 marks: critical analysis of given experimental data
- 25 marks: one essay from a choice of two titles



At least 10% of the marks in assessments for biology will require the use of mathematical skills.

These will be at least at the level of the **GCSE Higher** paper and will be practiced in class and assessed in the examination questions.



At least 15% of the marks in assessments for biology will require the use of practical skills.

Practical skills will be assessed by examination. However, you will be awarded in addition to this a pass or fail grade based on the following competencies:

1. Following written procedures

 Applying investigative approaches and methods when using instruments and equipment

3. Safely using a range of practical equipment and materials

4. Making and recording observations

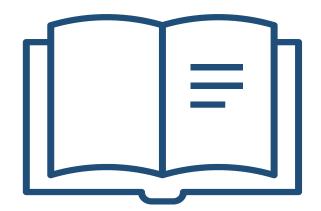
5. Researching, referencing and writing reports



You will keep an experiment log:

1. Revise from this for your examinations.

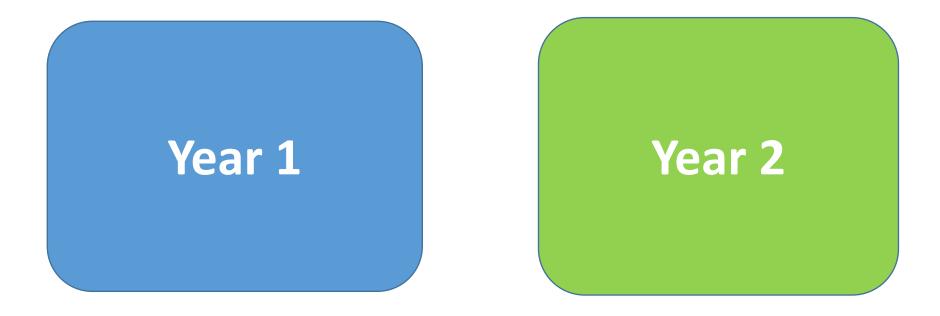
2. Keep your work organised! You may have to provide your log book as evidence for your Practical Endorsement.



Time for a quiz!



I will study cells during...

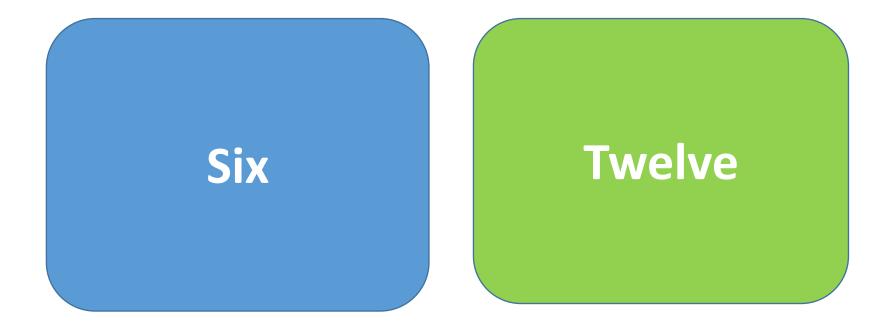


The following is a Year 2 topic -

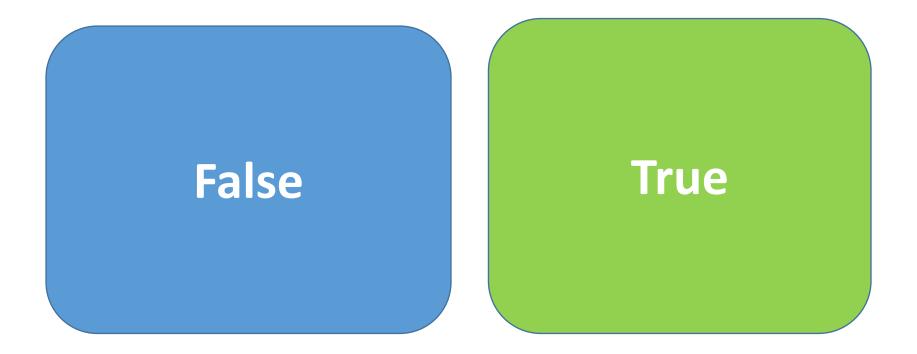
The control of gene expression

Biological molecules

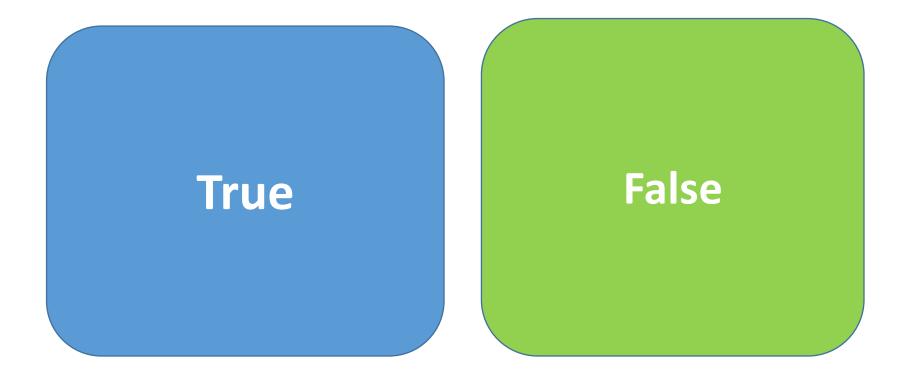
The number of compulsory practicals in Year 1 is -



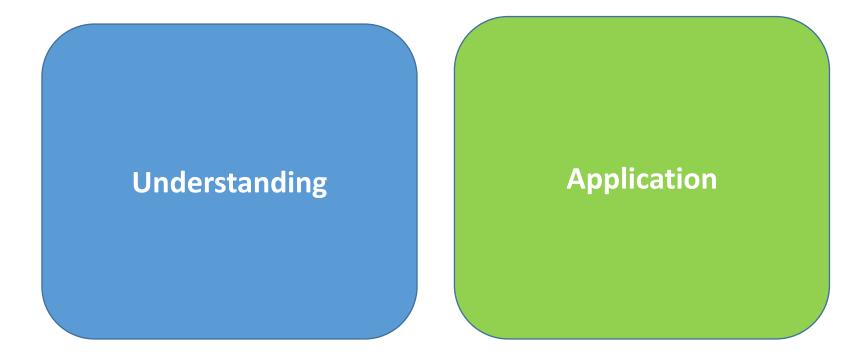
I will receive a practical endorsement qualification at the end of my course



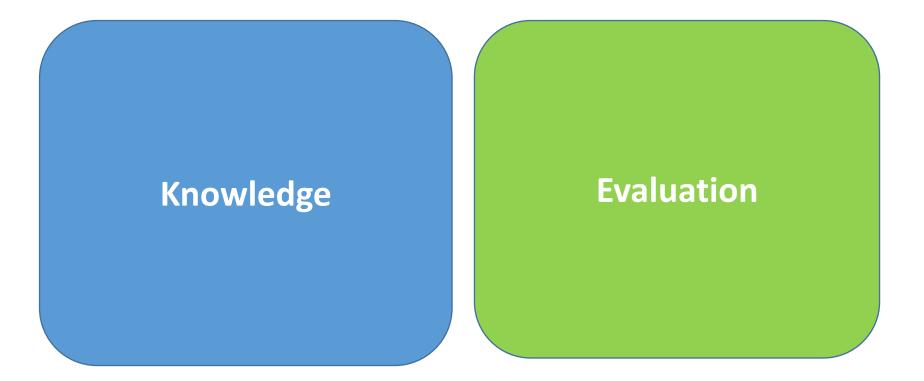
I can achieve grades A-E for my practical endorsement.



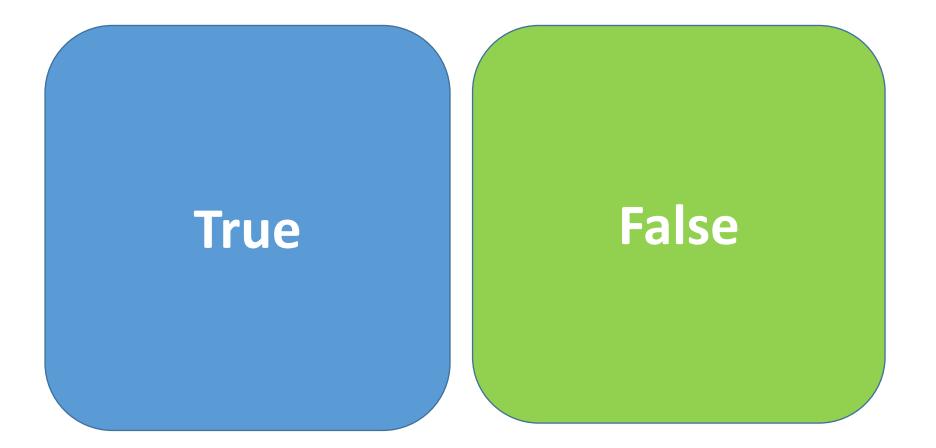
Which is the more difficult skill?



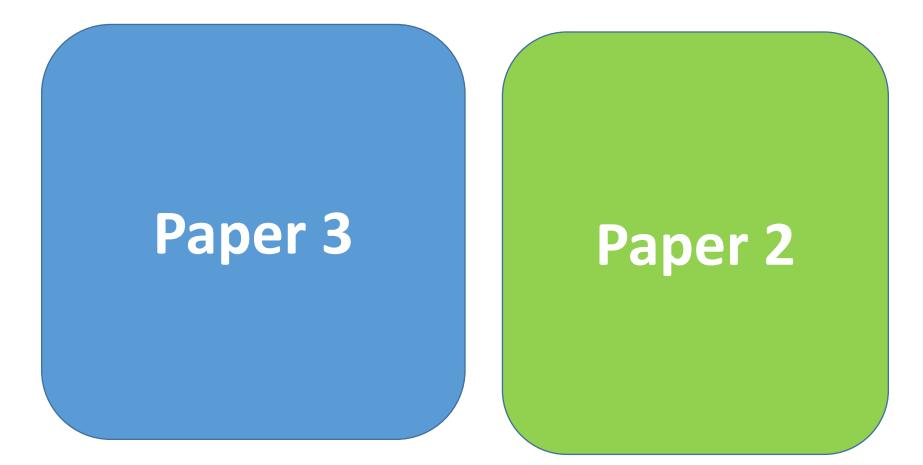
Which is the more difficult skill?



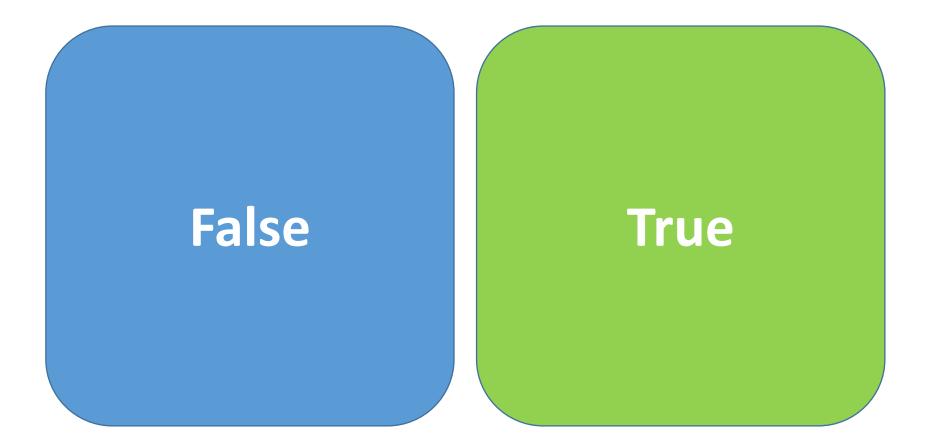
I will have to write an essay during paper 3 of the A-Level exam



Which is the longer A-Level Paper?



The maths skills I need include some from higher level at GCSE.



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