

A LEVEL TRANSITION WORK

A level Biology

Specification

AQA GCE Biology

<https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF>

Course Overview

| Year 1 Subject Content | Year 2 Subject Content |
|---|--|
| <ul style="list-style-type: none"> • Biological molecules • Cells • Organisms exchange substances with their environment • Genetic information, variation and relationships between organisms | <ul style="list-style-type: none"> • Energy transfers in and between organisms • Organisms respond to changes in their internal and external environments • Genetics, populations, evolution and ecosystems • The control of gene expression |

Practical Endorsement

There is no coursework component to the course and 15% of the marks for A-level Biology are based on what you learned in your practicals. You will achieve a qualification following the successful completion of twelve practicals throughout the A level course. This is separate to your Biology examination grade.

Recommended Reading / Revision

AQA Biology Oxford textbook (Toole & Toole) – this book will be issued in school)

CGP A Level Biology Revision
 CGP Maths for A Level Biologists

A level biology questions and answers
mathsmadeeasy.co.uk/a-level-biology-revision/exam-questions-topic-aqa/

AQA A2 Biology (New Specification):
<https://www.youtube.com/playlist?list=PL41HBQMUThQyQCzIAh1YjP8EUCPwB45DD>

AQA AS Biology (New Specification):
<https://www.youtube.com/playlist?list=PL41HBQMUThQxmp1dt3aauH6h1D0oeRaO2>

Bozeman Biology videos <http://www.bozemanscience.com/biology-main-page>

Snap Revise - £30 for each year.
<https://snaprevise.co.uk/search?qualification=A-level&examboard=AQA>

Crash Course on youtube
https://www.youtube.com/playlist?list=PLNQL82WAcOJXP6HP0iryIS_E5JhL4ks0f

A LEVEL TRANSITION WORK

Transition work for Biology A level students

1. Define the following;
 - a. Atom
 - b. Molecule
 - c. Element
 - d. Compound
 - e. Ion
 - f. Organic
 - g. Inorganic
 - h. Macronutrient
 - i. Micronutrient
 - j. Monomer
 - k. Polymer
2. What are the most common elements in living organisms? (I'm looking for 4)
3. What are the roles of the following in cells?
 - a. Magnesium
 - b. Iron
 - c. Phosphate
 - d. Calcium
 - e. Sodium
 - f. Hydrogen
4. Describe
 - a. Covalent bonding
 - b. Ionic bonding
5. Why is water essential?
6. Water is described as being polar. What does this mean?
7. What is a hydrogen bond?
8. Why is water able to form hydrogen bonds?
9. What is special about the surface tension of water?
10. Why is water a good solvent?
11. What are the thermal properties of water?
12. What is a condensation reaction?
13. What is a hydrolysis reaction?
14. What is polymerisation?
15. What is metabolism?
16. What is a 'mole' and what is a 'molar solution'?