



North Halifax Grammar School – 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



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'?

Additional Questions & Answers

AQA offer a transition guide to help students make the transition from GCSE to A-level Biology. Questions and answers can be found here on the school website:

<https://www.nhgs.co.uk/sixth-form/transition-work/biology-questions-and-answers>