



Subject	Biology A level		
Title/Topic	Format	Length	
Paper 1 – Biology	Written	45 mins	
Paper 2 – Biology	Written	45 mins	

In this Advent assessment I will be asked to show I can...

Paper 1

- Describe the structure of the cell surface membrane and explain its properties (spec point 2.2)
- Describe the processes of both passive and active transport of substances across a membrane – describe the role of carrier and channel proteins in this (spec point 2.4)
- Describe the structure of DNA (spec point 2.5)
- Explain how DNA is replicated and explain Meselson and Stahl's experiment (spec point 2.11)
- Describe how protein synthesis occurs (spec point 2.6) and compare it to DNA replication.
- Calculate BMI and use other indicators to determine if someone is at risk of CVD (spec point 1.16)
- Describe benefits and the use of treatments for CVD (spec point 1.18)
- Describe the structure of an amino acid and the formation of peptide bonds (spec point 2.9)
- Understand and describe the blood clotting cascade and interpret data about problems with the process (spec point 1.6)
- Understand patterns of inheritance and use Punnett squares to show monohybrid inheritance (spec point 2.13)
- Explain methods of screening embryo's (spec point 2.15)

Paper 2

- Describe and explain the double circulatory system in mammals (spec point 1.4)
- Calculate magnification
- Describe the structure of blood vessels and relate this to their function (spec point 1.3)
- Describe how to investigate the effect of a substance on the heart rate of Daphnia (Core practical 1)
- Describe how cystic fibrosis affects cell membranes and the consequences of this (spec point 2.14)



What should I do to revise and prepare for this assessment?

To prepare for this assessment:

1. Use your processes book and do look/cover/write/check to learn key processes.
2. Use your revision guide.
3. Make flash cards for key knowledge and definitions.
4. Use Seneca learning.
5. Crash course videos on topics

What useful websites/resources could I use to help me prepare?

Seneca learning

[Free Homework & Revision for A Level, GCSE, KS3 & KS2 \(senecalearning.com\)](https://www.senecalearning.com)

Your revision guide – use the revision guide suggested to you by your teacher.

Past paper questions from the exam board website or physics and maths tutor