

<b>Exam Board:</b>	AQA
<b>Subject:</b>	Biology
<b>Paper:</b>	Biology Paper 1
<b>Marks available:</b>	70
<b>Length of paper:</b>	1 hour 15 minutes
<b>Topics:</b>	Cell Biology, Organisation, Infection & Response, Bioenergetics

### Exam Information, guidance and hints

#### Command words:

- Complete - Fill in gaps/add labels
- Give - Recall a simple fact
- Draw - Draw a symbol, diagram or graph
- Name - Only a short answer is required, not an explanation or a description. Often it can be answered with a single word, phrase or sentence.
- Describe - Give details about an event, idea or a process
- Explain - Give reasons for an event, idea or process (use because/so)
- Compare - Identify how things are similar/different
- Suggest - Use your own knowledge in an unfamiliar context
- Plan - Write a method
- Calculate - Use numbers in a formula

#### Online Resources

- [Cognito past papers](#)

#### Hints/tips:

- If you are given the equation, ensure you are using it correctly.
- When plotting a graph make sure you are using a pencil & ruler. Be accurate when plotting the points / drawing the bars.

#### Foundation Example Papers and Markschemes

#### Higher Example Papers and Markschemes

<a href="#">2018 F Paper</a>	<a href="#">Annotated P1</a>	<a href="#">2018 MS</a>	<a href="#">2018 H paper</a>	<a href="#">Annotated P1</a>	<a href="#">2018 MS</a>
<a href="#">2019 F Paper</a>	<a href="#">Annotated P1</a>	<a href="#">2019 MS</a>	<a href="#">2019 H Paper</a>	<a href="#">Annotated P1</a>	<a href="#">2019 MS</a>
<a href="#">2020 F Paper</a>	<a href="#">Annotated P1</a>	<a href="#">2020 MS</a>	<a href="#">2020 H Paper</a>	<a href="#">Annotated P1</a>	<a href="#">2020 MS</a>

### PLC Biology Paper 1 - Mock 1

Topic	Key information related to topic	Sparx Code	Resources/Information related to topic	How well do you understand this topic? RAG		
				Red	Amber	Green
Cell Biology	Plan how to investigate the effect of changing the concentration of sugar solution of the mass of carrot pieces.	R949 R110	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08</a>			
Cell Biology	Explain the expected results when investigating the effect of changing the concentration of sugar solution of the mass of carrot pieces. How would you determine the concentration of sugar inside the carrot cells.	R685	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08</a>			
Cell Biology	Explain the differences between light microscopes and electron microscopes.	R878	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.19">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.19</a>			
Cell Biology	Plan a method to view a prepared slide under a microscope.	R132 R878 R585	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.04">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.04</a>			
Cell Biology	Describe the differences between prokaryotic and eukaryotic cells.	R489 R883	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02</a>			
Cell Biology	Name and describe the functions of subcellular structures in animal and plant cells.	R220 R976	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02</a>			
Cell Biology	Calculating magnification	R585 R132	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.06">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.06</a>			
Cell Biology	Name and describe the 3 main stages in mitosis.	R368	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_8.09">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_8.09</a>			

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Organisation	Describe the food tests used to show the presence of each of the following: - Complex carbohydrates - Simple carbohydrates - Protein - Lipids	R647	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02</a>			
Organisation	Explain how lipids, carbohydrates and proteins are broken down in the body (include the enzymes required, where enzymes are produced and the products of breakdown)	R244 R667 R800 R154 R642	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02</a>			
Organisation	Explain the differences between malignant and benign tumours	R669	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.13">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.13</a>			
Organisation	Describe the function of the lungs and its adaptations to maximise gas exchange.	R652	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.05">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.05</a>			
Organisation	Describe the blood vessels that can be affected by Coronary Heart Disease, explain the treatments for CHD and describe some lifestyle factors that can increase the risk of CHD.	R583	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.21">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.21</a>			
Organisation	Describe the process of transpiration and explain some of the factors that can affect the rate of transpiration.	R419 R973 R600	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.05">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.05</a>			
Organisation	Name the four main components of blood and explain its function.	R673	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.03">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.03</a>			
Infection & Response	Explain how viruses cause illness and why they are so difficult to treat.	R366 R329	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.03">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.03</a>			

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Infection & Response	Explain how vaccination causes immunity.	R938 R582	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.08">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.08</a>			
Infection & Response	Name and describe the steps in both preclinical and clinical trials, including what each stage is testing for..	R781	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.15">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.15</a>			
Bioenergetics	Describe what a limiting factor is and give examples in photosynthesis. Explain the effect of increasing these factors on the rate of photosynthesis.	R979 R248	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.02</a>			
Bioenergetics	Explain the process of photosynthesis and give some uses of glucose produced in photosynthesis.	R827 R732 R979 R917	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.01">https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.01</a>			