

<b>Exam Board:</b>	AQA
<b>Subject:</b>	Biology
<b>Paper:</b>	Biology Paper 1
<b>Marks available:</b>	100
<b>Length of paper:</b>	1 hour 45 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

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-aq-a-h-t_1.08">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-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-aq-a-h-t_1.08">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.08</a>			
Cell Biology	Culturing microorganisms	R308	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15</a>			
Cell Biology	Explain how to safely set up an agar plate using aseptic techniques.	R426	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15</a>			
Cell Biology	Explain how to interpret the results when scientists grow bacteria on an agar plate with paper discs containing different antiseptics placed in the petri dish.	R611	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.15</a>			
Cell Biology	Name and describe the 3 main stages in mitosis.	R368	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_8.09">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_8.09</a>			
Cell Biology	Calculating magnification	R585 R132	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.06">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_1.06</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-aq-a-h-t_5.21">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.21</a>			

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Organisation	Describe the function of the heart.	R806	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.01">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.01</a>			
Organisation	Describe the function of the lungs and its adaptations to maximise gas exchange.	R652	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.05">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.05</a>			
Organisation	Explain how lipids, carbohydrates and proteins are broken down in the body (include the enzymes required and the products. How would a reduction of each enzyme affect digestion?	R244 R667 R800 R154 R642	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_2.04">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_2.04</a>			
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/coursestopic/b2-gcse-aqa-h-t_2.02">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_2.02</a>			
Organisation	Describe the structure, adaptations and function of the specialised cells within plants.	R451 R318 R419	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_6.04">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_6.04</a>			
Organisation	Compare the structures used to move water and dissolved sugars around a plant.	R419 R973 R600	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_6.05">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_6.05</a>			
Organisation	Name the type of cell division occurring in cancerous cells and name 2 risk factors that can increase the risk of developing cancer.	R669	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_5.13">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_5.13</a>			
Organisation	Name the four main components of blood and explain its function.	R673	<a href="https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.03">https://cognitoedu.org/coursestopic/b2-gcse-aqa-h-t_4.03</a>			

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Infection & Response	Explain why viruses are so difficult to treat.	R366 R329	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.03">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.03</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-aq-a-h-t_5.15">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.15</a>			
Infection & Response	Name the plant diseases caused by ion deficiencies, give the ion missing and the symptoms.	R746 R914	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.17">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_5.17</a>			
Bioenergetics	Explain how limited oxygen entering the body will impact the human body.	R336 R545	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_3.04">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_3.04</a> <a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_3.06">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_3.06</a>			
Bioenergetics	Explain why leaves would not produce starch if they are restricted from obtaining light or carbon dioxide.	R827 R732 R979 R917	<a href="https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_6.01">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_6.01</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-aq-a-h-t_6.02">https://cognitoedu.org/coursesubtopic/b2-gcse-aq-a-h-t_6.02</a>			