Exam Board:	AQA
Subject:	Biology
Paper:	Biology Paper 1
Marks available:	70
Length of paper:	1 hour 15 minutes
Topics:	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 and label both axis with units
- Read the full questions to ensure you know exactly what it is asking of you.

Foundation Example Papers and Markschemes			Higher Example Papers and Markschemes		
2018 F Paper	Annotated P1	2018 MS	2018 H paper	Annotated P1	2018 MS
2019 F Paper	Annotated P1	2019 MS	2019 H Paper	Annotated P1	2019 MS
2020 F Paper	Annotated P1	2020 MS	2020 H Paper	Annotated P1	2020 MS

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	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08			
Cell Biology	Explain the expected results when investigating the effect of changing the concentration of sugar solution of the mass of vegetable pieces. How would you determine the concentration of sugar inside the vegetable cells.	R685	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.08			
Cell Biology	Calculate the surface area to volume ratios of objects	R359	https://www.youtube.com/watch?v=GC7phTfotpE			
Cell Biology	Explain the differences between light microscopes and electron microscopes.	R878	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.19			
Cell BIology	Plan a method to view a prepared slide under a microscope.	R132 R878 R585	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.04			
Cell Biology	Describe the differences between prokaryotic and eukaryotic cells.	R489 R883	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02			
Cell Biology	Name and describe the functions of subcellular structures in animal and plant cells.	R220 R976	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_1.02			
Cell Biology	Identify specialised cells and their roles in the human body	R220	https://www.youtube.com/watch?v=LNLz7mswPkQ			
Cell Biology	Calculating magnification	R585 R132	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_1.06			

Topic	Key information related to topic	Sparx Code	Resources/Information related to topic	How well do you understand this topic? RAG		
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Cell Biology	Name and describe the 3 main stages in mitosis.	R368	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_8.09			
Cell Biology	Describe the process of diffusion and identify conditions under which it occurs	R264	https://www.youtube.com/watch?v=IxHMJaXOzP4&t=22s			
Cell Biology	Identify where stem cells are found and what their uses are	R478	https://www.youtube.com/watch?v=fp5H3SslskQ https://www.youtube.com/watch?v=5IN2NrGBOYY			
Organisation	Describe the structure of the digestive system	R154	https://www.youtube.com/watch?v=eSGRpPcJGIA			
Organisation	Describe the food tests used to show the presence of each of the following: - Complex carbohydrates - Simple carbohydrates - Protein - Lipids	R647	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02			
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	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_2.02			
Organisation	Explain the differences between malignant and benign tumours	R669	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.13			
Organisation	Describe the function of the lungs and their adaptations to maximise gas exchange.	R652	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.05			

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Organisation	Describe the structure of the human heart and blood vessels that transport blood to and from it.	R806 R350	https://www.youtube.com/watch?v=31nyaBdC-q8 https://www.youtube.com/watch?v=AlSQEs694qY&t=13s			
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	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.21			
Organisation	Describe the process of transpiration and explain some of the factors that can affect the rate of transpiration.	R419 R973 R600	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.05			
Organisation	Explain the investigation used to demonstrate the effect of concentration on amylase activity	R642	https://www.youtube.com/watch?v=JyXXoevEWc8			
Organisation	Name the four main components of blood and explain its function.	R673	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_4.03			
Infection & Response	Explain the difference between communicable and non-communicable diseases and explain the impact non-communicable diseases can have on the body.	R329	https://www.youtube.com/watch?v=QYWNXp36O48 https://www.youtube.com/watch?v=sz1ZckN2kJM			
Infection & Response	Explain how viruses cause illness and why they are so difficult to treat.	R366 R329	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.03			
Infection & Response	Explain how bacteria cause illness and how they are treated	R421	https://www.youtube.com/watch?v=-30_21Juyek			
Infection & Response	Explain how vaccination causes immunity.	R938 R582	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-c_5.08			

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Infection & Response	Name and describe the steps in both preclinical and clinical trials, including what each stage is testing for..	R781	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_5.15			
Infection & Response	Explain the consequences of plant diseases on plant growth	R914	https://www.youtube.com/watch?v=oVg6ycY3eXQ			
Infection & Response	Explain how and why drugs must be tested before use	R781	https://www.youtube.com/watch?v=w3ykU52K-Hw			
Infection & Response	HT ONLY: Explain the causes and effects of antibiotic resistance in bacteria	R328	https://www.youtube.com/watch?v=8NFk2WhG2eY			
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	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.02			
Bioenergetics	Describe the structure of the leaf and how it is adapted for its function	R827	https://www.youtube.com/watch?v=c9aUWHleZ_k			
Bioenergetics	Explain the process of photosynthesis and give some uses of glucose produced in photosynthesis.	R827 R732 R979 R917	https://cognitoedu.org/coursesubtopic/b2-gcse-aqa-h-t_6.01			
Bioenergetics	Describe the process of transpiration and how it can be demonstrated in plants.	R732	https://www.youtube.com/watch?v=s06FvGH3QJo			
Bioenergetics	Describe the structure of the respiratory system and how breathing aids respiration	r336	https://www.youtube.com/watch?v=v_j-LD2YEqg			
Bioenergetics	Explain the effect of exercise on respiration	R545	https://www.youtube.com/watch?v=3QIvixsepLI			
Bioenergetics	HT ONLY: Explain the inverse square law and carry out calculations associated with it	R979	https://www.youtube.com/watch?v=PYRLgwz9CWw			