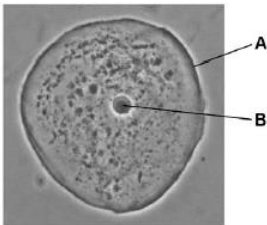


100 Marks Biology Paper 1

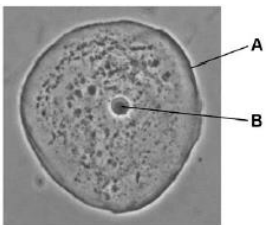
1 Mark Questions

1. Measles can't be treated using antibiotics. Why?
2. When we are ill, white blood cells produce to kill microorganisms.
3. Many strains of bacteria, including MRSA, have developed resistance to drugs called
4. Why is it difficult to kill a virus?
5. How do bacteria make us feel ill?
6. Which type of respiration produces lactic acid?
7. What is the name of the pigment that absorbs sunlight for photosynthesis?
8. In which tissue does water move around the plant?
9. What is the name of the process that releases energy in all living things?
10. What is the name of the process by which water moves into a plant?
11. Finish the equation for photosynthesis: carbon dioxide + water → oxygen +
12. Why is sunlight required for photosynthesis?
13. Complete the equation for aerobic respiration: Glucose + → carbon dioxide + water
14. Name one disease linked to obesity
15. Name one type of medicine which helps to relieve the symptoms of infectious disease.

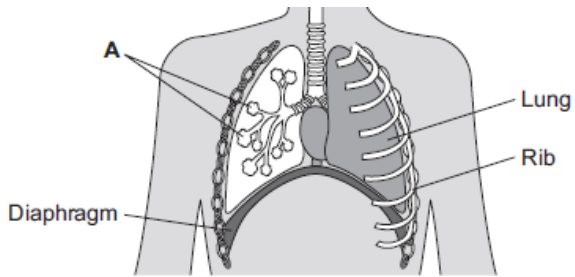
16. Identify A –



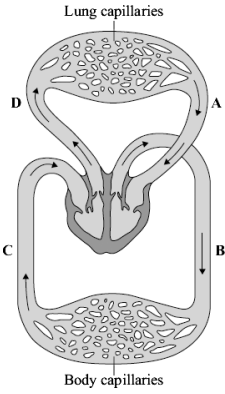
17. Identify B -



18. In which part of a cell does aerobic respiration take place?
19. Give the function of the cytoplasm.
20. Give the function of the chloroplast.
21. What is the function of a ribosome?
22. Which part of the cell is made of cellulose?
23. Which enzyme digests starch?
24. Name **one** organ that makes lipase.
25. What is produced when protease digests protein?
26. In which organ of the body is bile produced in?
27. In which part of the digestive system does digestion of starch begin?
28. What happens to enzymes if there is a big change in pH or temperature?
29. Name part



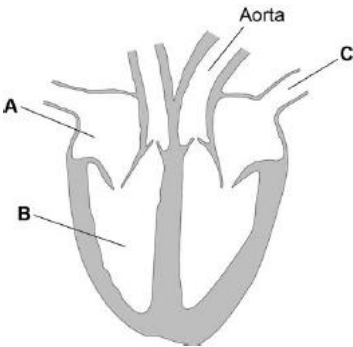
30. Give the letter of **one** blood vessel that is an artery.



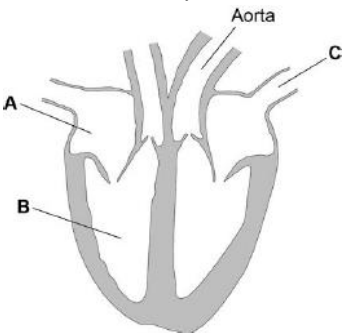
31. Oxygen moves into a cell by what process?

32. Name the type of blood vessel that has valves.

33. Name parts **A**.



34. Name parts **B**.

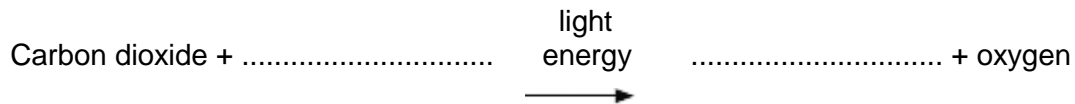


35. The heart is often described as a double pump. Describe why.

36. Which microorganism causes malaria?

2 Mark Questions

1. Complete the equation for photosynthesis.



2. Describe the adaptations of the sperm cell.

3. Name two substances needed in larger amounts by the muscles during vigorous exercise than when resting.

4. Give two ways the human body protects itself against the entry of pathogens.

5. Match up the key words with their definitions.

Word about drug testing

Definition

Dose

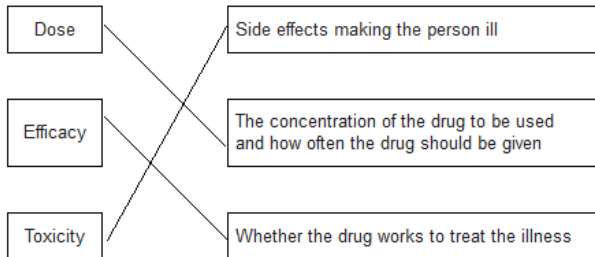
Side effects making the person ill

Efficacy

The concentration of the drug to be used and how often the drug should be given

Toxicity

Whether the drug works to treat the illness



6. Describe the function of muscle cells in the wall of the stomach.

7. What is the function of mitochondria?

8. Give two adaptations of the lungs that help the rapid absorption of oxygen into the blood.

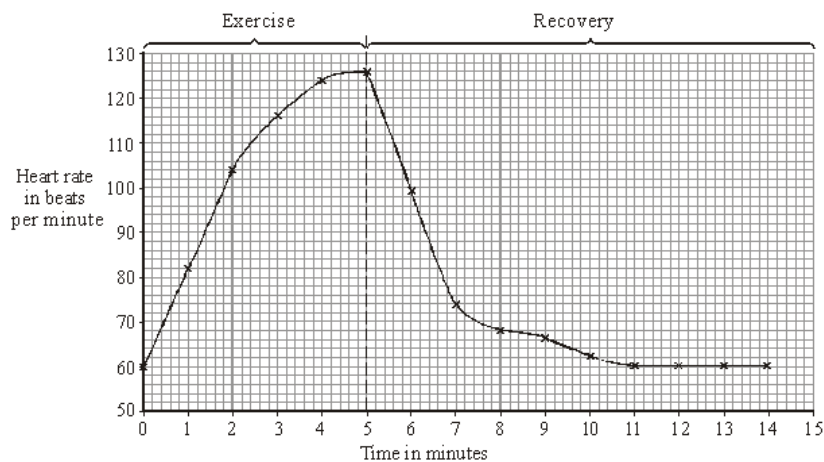
9. Describe how and where proteins are broken down.

10. Explain how a stent works in the heart.

11. Describe what lipase breaks down.

3 Mark Questions

1. A student pedalled an exercise cycle at constant speed for 5 minutes. The student's heart rate was recorded at one-minute intervals during the exercise and also during recovery.



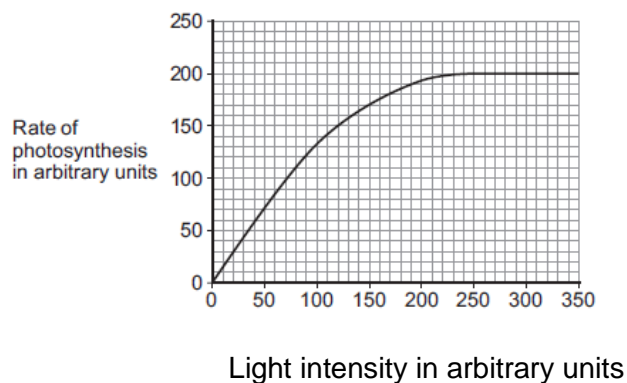
Describe the changes in heart rate between 0 and 14 minutes.

2. Complete the equation for respiration.

Sugar + → + + energy

3. Scientists investigated the effect of light intensity on the rate of photosynthesis.

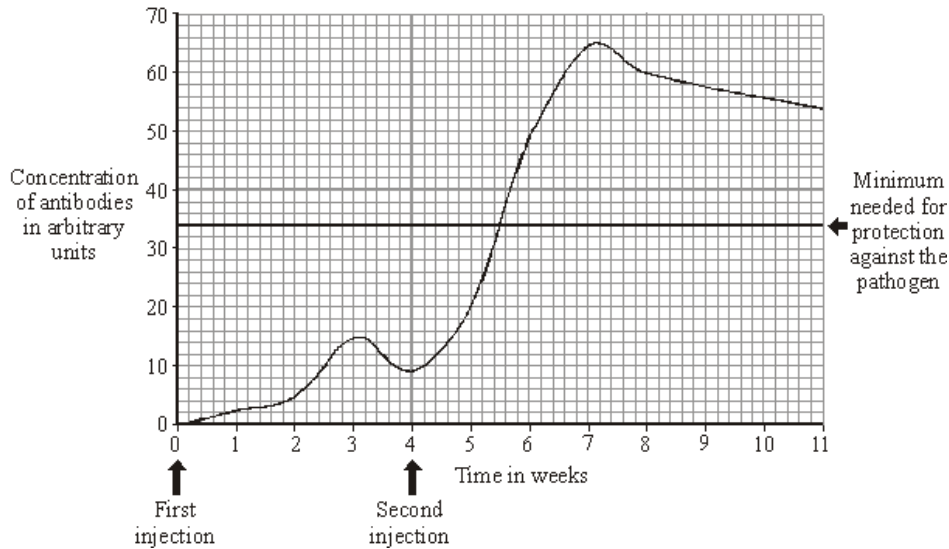
Describe the effect of increasing light intensity on the rate of photosynthesis. **You should include numbers from the graph in your description.**



4. Complete the table.

Part of the blood	Function
	Carries oxygen around the body
	Protects the body against infection
Plasma	

5. The graph shows the concentration of antibodies in the blood of a person after two injections of vaccine given four weeks apart. Describe what happened to the concentration of antibodies in the blood from week 0 to week 7.



6. Describe how protein is digested
7. Give **three** features of the alveoli that allow large amounts of oxygen to enter the blood.
8. Name a treatment that uses wire to treat CHD and explain how it works.
9. Multicellular organisms often have complex structures, such as lungs, for gas exchange. Explain why single-celled organisms, like algae, do **not** need complex structures for gas exchange.
10. What is osmosis?
11. Describe how a vaccine makes you immune to a disease.
12. Describe the breakdown of fats.
13. Compare aerobic and anaerobic respiration.