

**JOHN GRAY HIGH SCHOOL**

**KS3 SCIENCE: YEAR 7**

**CELLS**

**PAPER 2**

**Time : 45 mins**

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

1. This paper consists of **FOUR** questions.
2. Answer **ALL** questions.
3. Indicate your answers in the spaces provided.
4. Remember to read the questions properly before attempting to answer
5. You are permitted to use a calculator in this exam

**Name:** \_\_\_\_\_

**Teacher's Name:** \_\_\_\_\_

**DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.**

1. The diagrams below show an animal and plant cell.

a. Drag the words from the list below to correctly label the diagrams.

CELL WALL

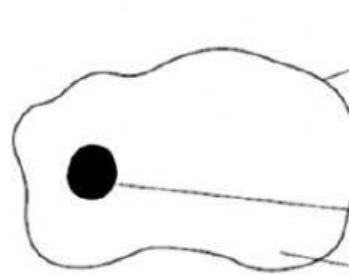
CELL MEMBRANE

CHLOROPLAST

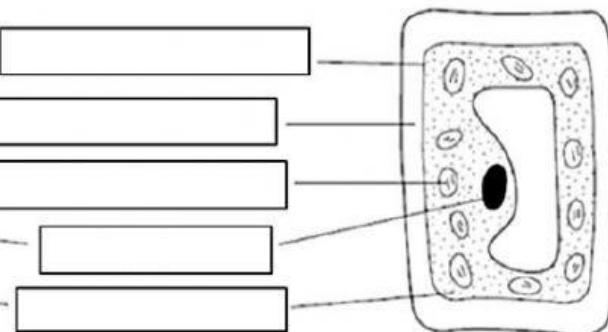
CYTOPLASM

NUCLEUS

Animal cell



Plant cell



(5 marks)

b. Indicate the function of the following parts of the cell by choosing the correct answer from the drop-down boxes.

i. The function of the mitochondrion is \_\_\_\_\_.

ii. The function of the vacuole is \_\_\_\_\_.

iii. The function of the chloroplast is \_\_\_\_\_.

iv. The function of the nucleus is \_\_\_\_\_.

v. The function of the cell membrane is \_\_\_\_\_.

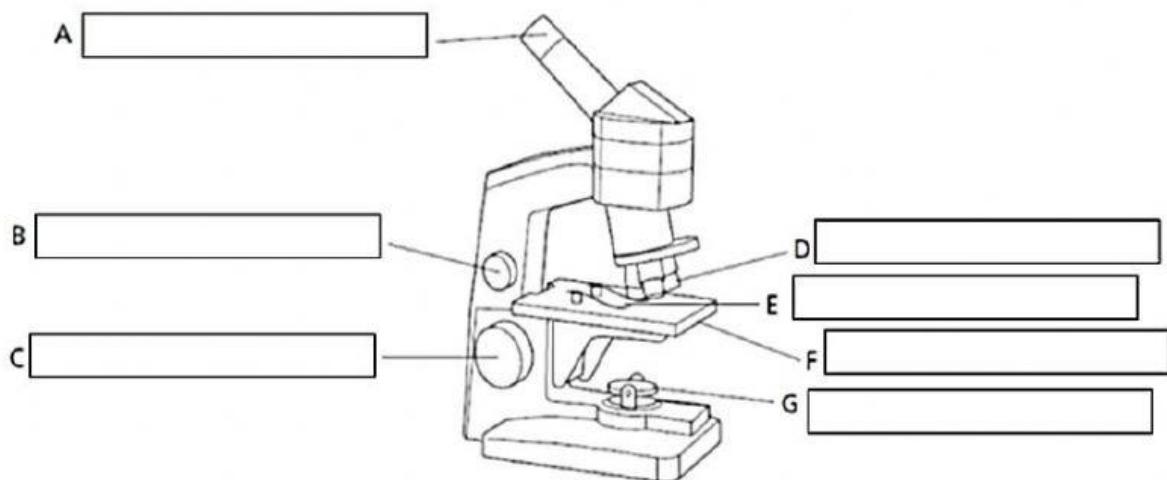
(5 marks)

(Total 10 marks)

2. a. The instrument shown in the diagram below is called a \_\_\_\_\_ and it is used to \_\_\_\_\_ small objects. (2 marks)

b. Drag the words from the box below to the correctly label the instrument.

coarse focus      eyepiece lens      fine focus  
mirror      objective lens      slide      stage



(7 marks)

c. Fill in the correct magnifications in the table below. Some have been done for you already.

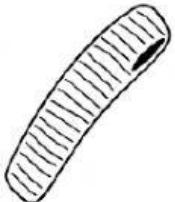
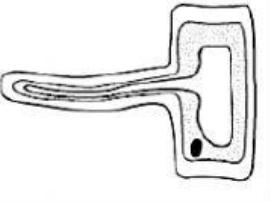
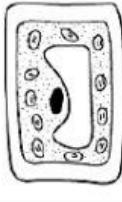
Magnification of eyepiece lens	Magnification of objective lens	Total magnification
x5	x10	x
x5	x40	x
x10	x	x150

(3 marks)

(Total 12 marks)

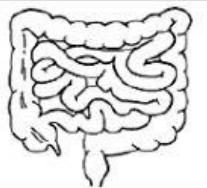
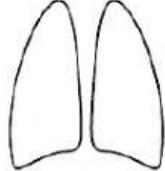
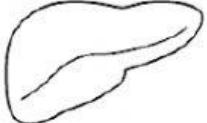
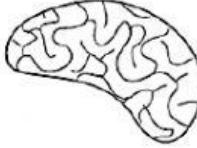
3. Cells are different shapes because they do different jobs.

a. Match up the picture with the name of the cell and its job. One of these has been done for you as an example.

Picture	Name	Job
	muscle cell	strands wave about to move things
	root hair cell	it can change length
	ciliated epithelial cell	it takes water from the soil
	palisade cell	it carries messages
	nerve cell	it has lots of chloroplasts to help the plant make food

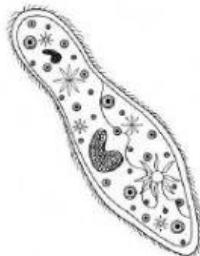
(8 marks)

b. Match up the picture of the organ with its name and its job. One of these has been done for you as a example.

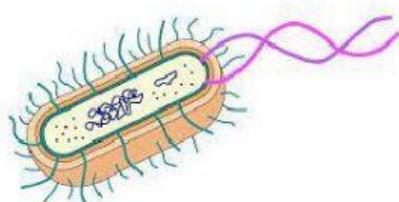
Picture	Name	Job
	lungs	controls the body
	brain	for breathing
	liver	pumps blood
	heart	makes and destroys substances
	intestines	stores and breaks up food
	stomach	digest and absorb food and water

(10 marks)  
(Total 18 marks)

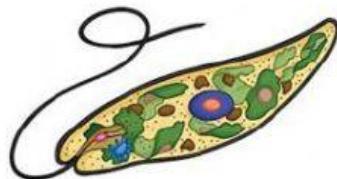
4. a. Identify the unicellular organism below by choosing the correct name from the drop-down boxes.



This organism is \_\_\_\_\_.



This organism is \_\_\_\_\_.



This organism is \_\_\_\_\_.

**(3 marks)**

b. Choose the correct terms from the drop-down boxes to complete the sentences below.

i. Cells of \_\_\_\_\_ have a nucleus, while cells of \_\_\_\_\_ do not.

ii. Micro-organisms differ from one another in their \_\_\_\_\_, how they \_\_\_\_\_ and how they \_\_\_\_\_.

**(5 marks)**

**(Total 8 marks)**

*This test is marked out of 48 marks*