GENERAL HUMAN BIOLOGY – YEAR 11

TASK 1 – MICROSCOPE SLIDES AND USES PRACTICAL

WEIGHTING: 10%

NAME: Marking Key

DATE: _____

MARK: _____ /38 = _____ %

Part A: Identify the unknown samples using your knowledge of different tissue types **10 marks**

1. Look at the slides under a microscope to determine which of the slides is: (3 marks)

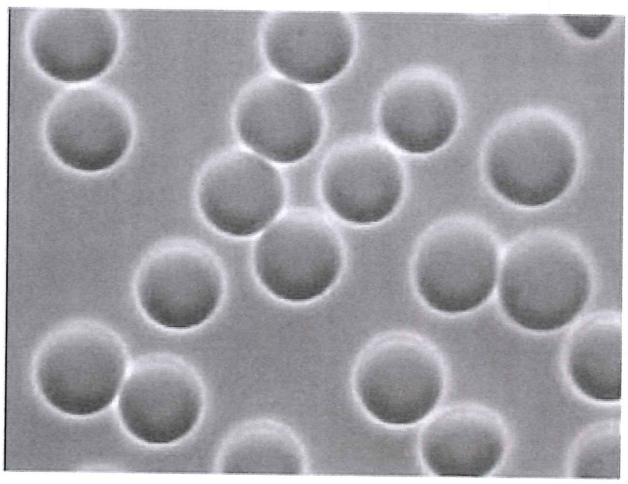
Red Blood cell, Liver Cell and cerebral cortex

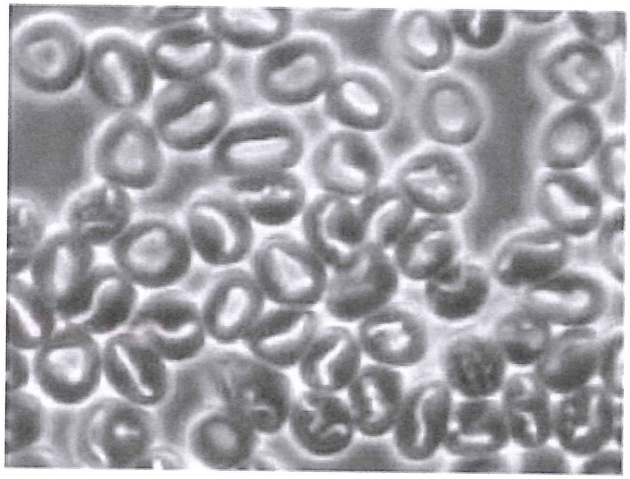
slide	Identity
Green	Cerebral
Orange	Liver
Black	blood

2. Explain how you knew you had correctly identified each slide (3 marks)

Red blood - no nucleus
Liver - 2 nuclei
Cerebral - 1 nuclei

3. Using the images below determine which is the healthy tissue and which is unhealthy (2 marks)





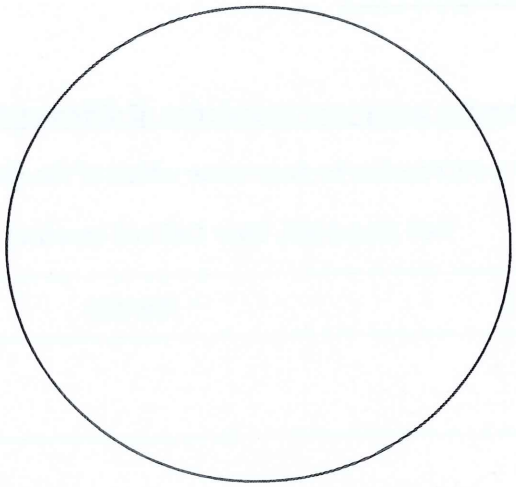
Identity: H U-H

4. How did you distinguish between the healthy and unhealthy tissue (2

H - plump cells
UH - burst → Shrivled

Part B: Scientific Drawing **11 marks**

5. For one of the slides from question 1 draw a scientific diagram in the circle below (5 marks)

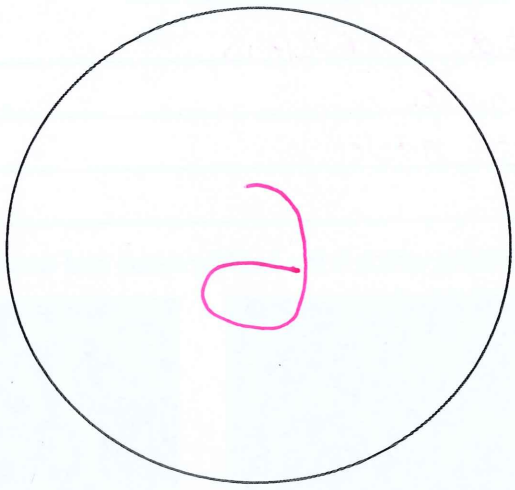


① pencil
① no shading
① labelled
② accurate

6. Before removing the slide show the teacher ① Focus ① magnification (2 marks)

7. Collect a microscope slide with the letter 'e' on it. Place it on the stage and in the space below, draw what you can see when looking down the eyepiece on the lowest magnification (1 mark)

e



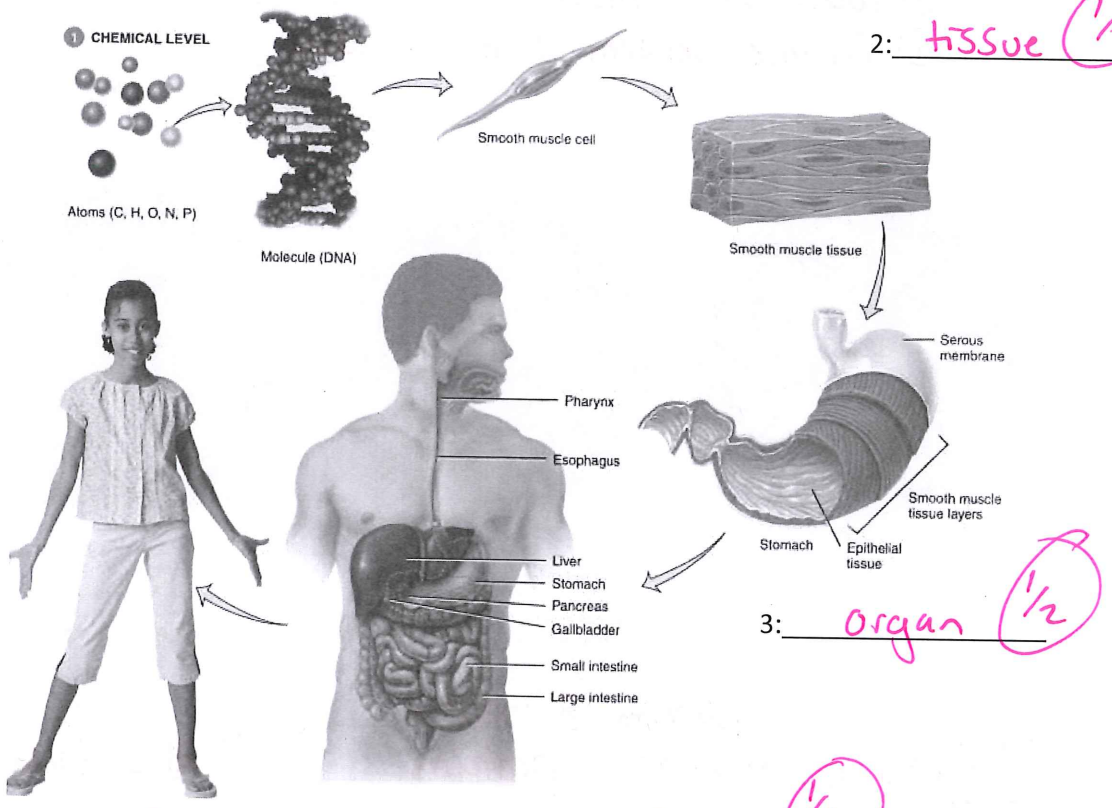
8. Describe what has happened to the image? What do you think is inside the microscope that causes this? (3 marks)

~~inverted~~ ① upside down
① flipped
① mirror

Part C: Body Organisation

8 marks

9. Complete the diagram by stating the level shown at each number. (2 marks)



10. Which level of the structural organisation is composed of two or more different types of tissues that have a specific function? (1 mark)

organ

11. At which level does respiration occur? Explain your answer. (2 marks)

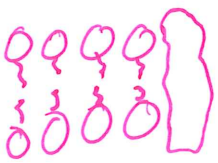
cell

mitochondria is an organelle - site of Resp

Part D: Characteristics of life

11 marks

12. Draw a diagram to represent a cell membrane (6 marks)



(1) pencil

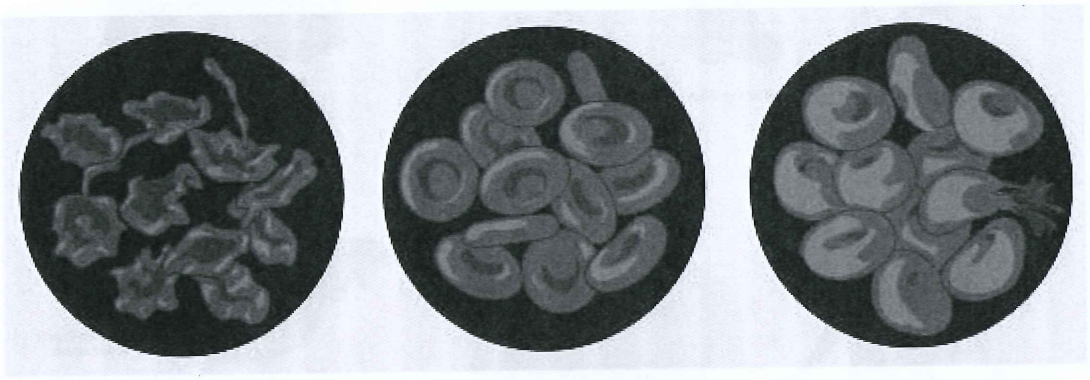
(3) labels
-> head
-> tail
-> Channel

(1) 2 layers

(1) 1 extra

13. Using the Picture below, explain how osmosis works when cells are placed into a hypotonic solution (3 .

① hypo - low Salt ↑ water
① water will move into cell
① Balance between Salt + water



14. Nikki looked through a microscope and saw lots of black dots in a pancreatic cell but when she looked at a blood cell she only saw a few. Explain this statement in detail. (3 marks)

identify Ribosome
① Pancreas requires proteins ① RBC doesn't need ribosomes
① Blood cell carries oxygen