

1. Who is considered the 'Father of microscopy'? *

- ☐ Antonie van Leeuwenhoek
- ☐ Robert Hooke
- ☐ Albert Einstein
- ☐ Alexandra Fleming

2. The micrograph of organism x illustrates that the organism is 55mm long. The scale bar on the micrograph stipulates that 4mm = 30 micron. How long is organism x in reality? *

- ☐ 0.4mm
- ☐ 0.9mm
- ☐ 0.004mm
- ☐ 0.66mm

3. The function(s) of the endoplasmic reticulum is... *

- ☐ to act as an internal transport system
- ☐ to play a role in the formation of lysosomes
- ☐ to play a role in protein synthesis
- ☐ both options 1 and 2
- ☐ both options 1 and 3

4. The selectively permeable membrane surrounding the vacuole is called the... *

- ☐ cell membrane
- ☐ tonoplast
- ☐ chromoplast
- ☐ cristae

5. You are viewing a Paramecium under a microscope on low-power. The length of the organism covers 0.2 of the diameter of the field of view. The length of your drawing is 12cm. What is the likely magnification factor of your drawing of this specimen? *

- ☐ 50x
- ☐ 10x
- ☐ 5x
- ☐ 15x

6. What part of the microscope regulates the amount of light that shines onto the specimen? *

- ☐ Condenser
- ☐ Diaphragm
- ☐ Mirror
- ☐ Lens

7. The type of cell that does not have a cell membrane around the nucleus. *

- ☐ Plant
- ☐ Animal
- ☐ Prokaryote
- ☐ Eukaryote

8. Which factors affect the rate of diffusion? *

- ☐ Concentration
- ☐ Temperature
- ☐ Agitation
- ☐ All of the above

9. The following are examples of active transport *

- ☐ Phagocytosis
- ☐ Pinocytosis
- ☐ Osmosis
- ☐ Both 1 and 2
- ☐ Both 1 and 3

10. Cellular respiration takes place in which organelle? *

- ☐ Nucleus
- ☐ Golgi Body
- ☐ Mitochondrion
- ☐ Cell membrane

11. Which organelles are found only in animal cells? *

- ☐ Lysosomes
- ☐ Mitochondria
- ☐ Plastids
- ☐ Ribosomes

12. Viewing epithelial cells under the microscope at 1200x magnification, the image size of a single cell is found to be 50mm. What is the true size of the cell? *

- ☐ 0.0416mm
- ☐ 0.0652mm
- ☐ 0.049mm
- ☐ 0.0523mm

13. If a plant cell is placed into a hypertonic solution, what happens? *

- ☐ Water moves out of the cell
- ☐ Water moves into the cell
- ☐ Net movement of water into and out of the cell are equal
- ☐ None of the above

14. Plastids found only in plant cells, include... *

- ☐ Chloroplasts
- ☐ Chromoplasts
- ☐ Leucoplasts
- ☐ All of the above

15. If you observe a cell with a non-living cell wall, large vacuole and mitochondria, it is likely a... *

- ☐ animal cell
- ☐ plant cell
- ☐ yeast cell
- ☐ bacteria