

Your exam will consist of:

- Multiple Choice Questions (15)
- Completion Questions (5)
- Modified True/False (5)
- Short Answer (5)
- Extra Credit (1)

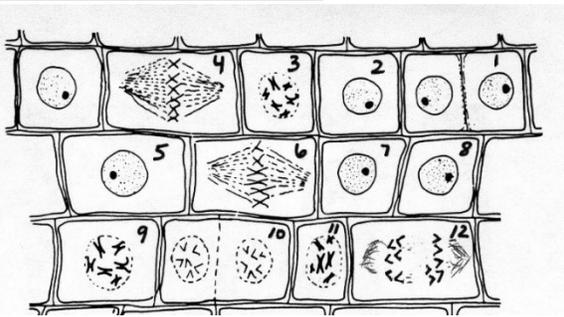
→ **If false, make it true!!**

M.C Question Stems (15 of which will be on test)

1. A protein is a compound consisting of two or more
2. Passive transport is different than active transport by
3. When a cell with 24 chromosomes reproduces and divides by mitosis, the resulting cells will each have how many chromosomes?
4. List 3 macromolecules
5. The cell membrane is semi permeable, which means
6. Why is it better to have many small cells as opposed to one big cell?
7. As a cell gets big, what happens to its surface area to volume ratio?
8. Looking at a cell in a microscope, I start on low power. Is my field of view bigger or smaller than on high power?
9. The removal of water when a larger compound is formed is called
10. Diffusion is the process by which
11. What is the cell membrane made of?
12. What organelle makes proteins?
13. Sam looks through a microscope to see some E. coli. He knows these are prokaryotes because
14. To denature an enzyme, I need to
15. A reason that fevers are dangerous for our proteins is because
16. Facilitated diffusion is like regular diffusion but it uses _____ to help diffuse molecules.

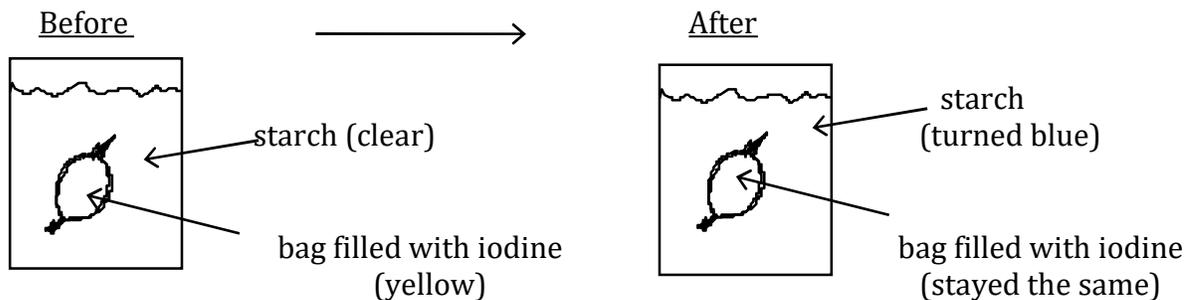
17. To locate a specimen on a prepared slide with a compound microscope, a student should begin with the low-power objective rather than the high-power objective because the
18. Prokaryotes are different than eukaryotes because
19. What are 2 differences between plant and animal cells?
20. A student observed a cell under the microscope. She identified it as a plant cell and not an animal cell because she noted the presence of a

Short Answer Practice

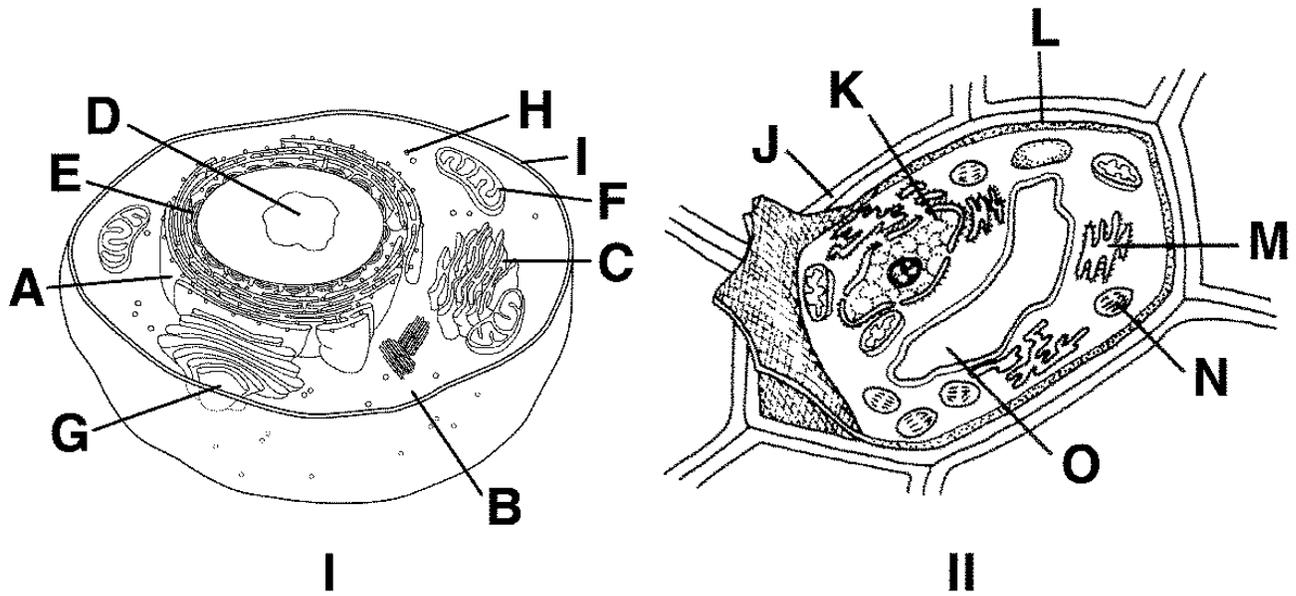


Looking at the diagram above, indicate the phase (interphase, prophase, metaphase, anaphase, or telophase) each onion root tip cell is undergoing.

You do an experiment to find out if iodine or starch can pass through a membrane. Here are your results. (Remember, when iodine and starch are mixed they turn blue/black.)



21. Did iodine pass through? Did starch? How do you know?



22. Label all letters with cell parts

23. Are these cells (above) prokaryotes or eukaryotes? How do you know?

24. Enzymes are important molecules in our bodies. What do enzymes do?

25. Contrast diffusion and active transport as methods for moving materials from one place to another in a cell.

26. Explain why one has to worry about keeping both the temperature and the pH of water within narrow ranges in order to assure the health of fish in a home aquarium.