

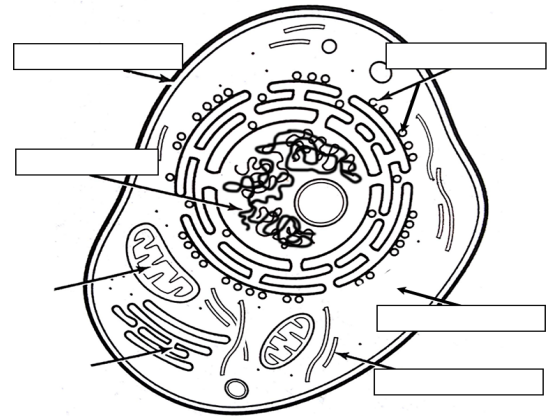
Guided Review: Cell Theory and Cell Structures

I. The Cell Theory

- Every living thing is made of one or more _____.
- The cell is the basic unit of structure and _____.
- All cells come from _____ cells.

II. Cell Features

- ALL cells have these parts:
 - Ribosomes – make _____
 - Cytoplasm – _____
 - DNA – _____
 - Cytoskeleton – _____
 - Cell Membrane – _____



III. Answer true or false

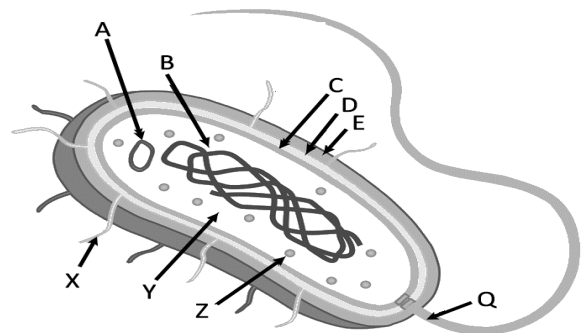
- Bacteria cells have a cell membrane. _____
- Plant cells have cytoplasm. _____
- Cells taken from fungi do not have DNA. _____
- Cells can only come from pre-existing cells. _____
- The framework of the cell is called the cytoplasm. _____
- The outer boundary of the cell is the cell membrane. _____

IV. Prokaryote Cells

- First cells; Simple cells; Bacteria
- These cells do NOT have a _____
- DNA floats within the _____

V. Bacteria Cell Matching

- _____ Flagellum
- _____ DNA (nucleoid region)
- _____ Ribosome
- _____ Pilus
- _____ Cell Wall
- _____ Cell Membrane
- E Cell Capsule
- _____ Cytoplasm
- _____ Plasmid



VI. Eukaryotic Cells

- Cells found in plants, animals, protists, and fungi
- Four main parts
 - _____
 - _____
 - _____ - “control center” of cell
 - _____ - small structures that carry out specific functions (“little organs”)
- Nucleus *Contains the instructions for building a cell and controlling its functions.
 - Nuclear Membrane _____
 - Nucleoplasm _____
 - Nucleolus _____
 - DNA _____
 - True or False
 - All cells have a nucleus. _____
 - All cells have a cell membrane. _____

3. The nucleus contains the cell's DNA. _____
4. Chromatin is made of DNA. _____
5. The nucleolus makes the cell's DNA. _____

VII. Cell Structures (in both Prokaryote and Eukaryotic Cells)

- a. Mitochondria = cell's _____ center
 - i. Uses _____ and _____ in a process called cellular _____
 - ii. It is sometimes called the: _____ of the cell
- b. Endoplasmic Reticulum
 - i. Transport, intracellular _____
 - ii. Rough ER contains _____
 - iii. Smooth ER does not
- c. Golgi Apparatus = packages and _____ proteins.
 - i. It is like a factory or a _____
 - ii. The _____ is the "package" that can be sent out of the cell.
- d. Lysosome - contains _____ enzymes which break things down.
 - i. Also called the "_____"
 - ii. *What disease is caused by abnormal lysosomes? _____
- e. Cytoskeleton - helps maintain the cell's _____
 - i. involved in _____
 - ii. _____ provide a framework (like our bones)
 - iii. includes _____ for cell division
 - iv. Structures that Function in Movement (part of cytoskeleton)
 1. _____ = tail-like structures
 2. _____ = shorter hair like structures
- f. Vacuole = storage area for water and other substances
 - i. Plant cells have a large _____ vacuole

VIII. Label the Animal Cell:

IX. How are Plant Cells different from Animal Cells?

- a. A large central _____ stores water.
- b. Chloroplasts are used to capture _____ to create food (photosynthesis)
- c. A cell wall surrounds the cell (outside the membrane)
- d. Square-shaped
- e. Label on the drawing the:

