

Questions (think of questions that might be on the exam)

II. Domains and Kingdoms

- Two main types of cells
- **Prokaryotic** – cells _____ nucleus
- EX: _____
- **Eukaryotic** – have a _____
- EX:
 - Plants
 - _____
 - Animals
 - _____

IV. Looking Inside of Cells

- **Organelles** – tiny cell structures that carry out specific _____ in the cell

A. Enter the Cell

1. **Cell Wall**

- a. a rigid layer of that surrounds _____
- b. _____ and _____ the cell
- c. _____ do not have a cell wall
- d. Made mostly out of _____
- e. _____ and _____ can pass through

2. **Cell Membrane**

- a. _____ have cell membranes
- b. Plant cells = _____ of cell wall
- c. Cells without cell wall = _____ boundary that separates the cell from its environment
- d. Controls what substances _____ and _____ a cell

B. Sail On to the Nucleus

1. **Nucleus**

- a. the _____ of the cell
- b. _____ all of the cell's _____

2. **Nuclear Envelope**

- a. _____ that surrounds the _____
- b. Material passes into and out of the _____ through _____ in the _____.

Q. What is the function of a cell wall?

Q. Where in the nucleus is genetic material found?

3. **Chromatin**

- a. Thin strands _____ in the _____
- b. Contains genetic information _____
 - The _____ for _____ the cell's functions

4. **Nucleolus**

- a. _____ found within the _____
- b. where _____ are made
 - Ribosome's produce _____

C. Organelles in the Cytoplasm

1. **Cytoplasm**

- a. the region between the _____ and the _____ made of a clear, thick, _____ fluid
- b. Many _____ are found in the cytoplasm

2. **Mitochondria**

- a. _____ of the cell
- b. convert _____ molecules into _____ that the cell can use to carry out its _____.

3. **Endoplasmic Reticulum (ER)**

- a. _____ that _____ proteins and other materials from _____ of the cell to another
- b. _____ types
 - Rough ER
 - _____
 - Smooth ER
 - _____

4. **Ribosomes**

- a. Location:
 - attached to the _____
 - floating in the _____
- b. Function: produce _____

5. **Golgi Bodies**

- a. Cells "_____"
- b. receives _____ and other newly formed materials from the _____
- c. packages _____ and materials
- d. _____ them to other parts of the cell.

Q. What organelle captures the energy of sunlight and uses it to make food for the cell?

6. **Chloroplasts**

- a. Floating in the _____ of _____ (and some other organisms)
- b. capture _____ from _____ to produce _____ for the cell

7. **Vacuoles**

- a. large _____ sacs floating in the cytoplasm
- b. _____ area for cells: food, _____ and other materials
- c. Most _____ cells have one large _____

8. **Lysosomes**

- a. small, round structures containing _____ that _____ materials in the cell

D. Specialized Cells

- Multi-celled organisms have _____ that are _____ to perform different _____
 - EX: RBC's, _____, nerve cells, _____
- _____ are organized into _____:
 - Cell – EX: _____
 - _____ - EX: nerve tissue
 - _____ - EX: brain
 - _____ - EX: nervous system

Summary (about 5 sentences):