**Biology I Cell Questions Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Section 7.2 (p. 196-207) Per: \_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What is an organelle? (use the glossary, then put it in your own words).
2. List and describe the 4 features almost all cells have.
3. Explain briefly the purpose and structure of the cell wall.
4. List and explain at least four differences between plant and animal cells (Fig. 7-5).
5. How are **mitochondria** and **chloroplasts** different from other organelles? Include information about Lynn Margulis’s research.
6. How are mitochondria and chloroplasts similar to each other? How do they differ from each other?
7. How do the products of ribosomes in the cytoplasm differ from those of ribosomes located on rough ER?
8. Why are cells stained before looking at them in the microscope?
9. What are the functions of the central vacuole in mature living plant cells?

**Complete the Table on the back page comparing cell organelles and their functions**

|  |  |  |
| --- | --- | --- |
| **Organelle** | **Plant/Animal/Bacteria?** | **Function** |
| Cell wall |  |  |
| Cell membrane |  |  |
| Cytoplasm |  |  |
| Nucleus |  |  |
| Nuclear Membrane |  |  |
| DNA  (chromatin or chromosomes) |  |  |
| RNA |  |  |
| Nucleolus |  |  |
| Ribosome |  |  |
| Rough ER |  |  |
| Smooth ER |  |  |
| Golgi Body |  |  |
| Vesicle |  |  |
| Central Vacuole |  |  |
| Chloroplast |  |  |
| Mitochondria |  |  |
| Centrosome or Centrioles |  |  |
| Lysosomes |  |  |
| Cytoskeleton |  |  |
| Cilia and Flagella |  |  |