

Cell History and Structures – Notes Organizer

1. What is a *cell*?

2. **Cells** are often referred to as the “**Building Blocks**” of _____.

3. Fill in the following table of scientists important to our modern day understanding of cells.

| SCIENTIST NAME | DATE | SCIENTIFIC CONTRIBUTION |
|------------------------------|-------------|--------------------------------|
| <i>Robert Hooke</i> | | |
| <i>Anton von Leeuwenhoek</i> | | |
| <i>Matthias Schleiden</i> | | |
| <i>Theodore Schwann</i> | | |

4. List the three fundamental ideas behind the **CELL THEORY**.
 - a.

 - b.

 - c.

5. Define **prokaryote**:

6. The only prokaryotic organism is _____.

7. Define **eukaryote**:

8. The **endosymbiotic theory** explains the origin of _____ cells.

a. Summarize the **endosymbiotic theory**.

9. Define **unicellular**:

10. Define **multicellular**:

11. Identify the defining characteristics of **each cell type**.

| Bacteria Cell | Plant Cell | Animal Cell |
|----------------------|-------------------|--------------------|
| | | |

12. What is an **organelle**?

13. Fill in the following organelle chart.

| Organelle Name | Organelle Function | Cell Type – Bacteria, Animal, Plant? |
|--------------------------|---------------------------|---|
| Nucleus | | |
| Cell Membrane | | |
| Cell Wall | | |
| Chloroplasts | | |
| Cytoskeleton | | |
| Endoplasmic Reticulum | | |

| | | |
|-----------------|--|--|
| Golgi Apparatus | | |
| Lysosomes | | |
| Mitochondria | | |
| Ribosomes | | |
| Vacuole | | |
| Cytoplasm | | |