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| --- | --- | --- | --- |
| **Organelle** | **Description****(What it looks like)** | **Function****(What it does)** | **Analogy****(It’s like…)** |
| *Nucleus* |  |  |  |
| *Cytoplasm* |  |  |  |
| *Cell Membrane* |  |  |  |
| *Mitochondria* |  |  |  |
| *Large Vacuole* |  |  |  |
| *Cell Wall* |  |  |  |
| *Chloroplasts* |  |  |  |



All cells fall into one of two broad categories: **pro**karyotic and **eu**karyotic. Only the single-celled organisms of the domains Bacteria and Archaea are classified as prokaryotes—***pro*** means before and *kary* means nucleus. Animals, plants, fungi, and protists are all eukaryotes—***eu*** means true—and are made up of eukaryotic cells.

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| --- | --- | --- |
| **Characteristic** | **Prokaryotic Cell** | **Eukaryotic Cell** |
| Genetic material in nucleus |  |  |
| Organelles surrounded by membranes |  |  |
| Size and complexity |  |  |
| Can carry out all processes needed to stay alive |  |  |
| Example |  |  |