**Pro/Euk - Cell Biology COMPLETE Notes**

**Questions/Pictures/ Key Words**

****

**“…”** means something the teacher said

Two types of cells:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cells
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cells

Every thing we know about cells we call
**“cell theory”.**

* Cell Theory says that….
1. All living things are made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Cells are the basic units of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and f\_\_\_\_\_\_\_\_\_\_\_ in all living things. In other words, cells are like the building blocks of all living things.
3. New cells are only made from \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_.

Cells come in all shapes and sizes!

* There are two types of cells:

1) Prokaryotic Cells

2) Eukaryotic Cells

* Big differences between cell types:

*STRUCTURAL differences.*

Prokaryote Cell: *A single celled organism that does* ***not*** *have a nucleus.* – “*PRO-NO! “*

Traits of Prokaryotes: (pro-care-ee-ohts)

1. They do not have a , and their genetic material

2. They have some organelles, but not many.

3. They are less \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that eukaryotes.

4. All \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are prokaryotes.

•Bacteria is good, who knew?!

* + - Decomposers
		- In digestive system
		- 10x as many bacterial cells as human cells in the human body!
		- Needed for cheese & yogurt

Summary:

**Questions/Pictures/ Key Words**

****

Eukaryote Cell: *A more complex cell with a nucleus and many organelles.* – “*Eu-DO!”*

Traits of **Eukaryotes:** (you-care-ee-othts)

1. They all have a where the genetic material of the cell is stored.

2. They have \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ that work together to help the cell function.

3.Eukaryotic cells are much more \_\_\_\_\_\_\_\_\_\_\_\_\_ then prokaryotic cells.

4. They can be just one cell or can make up more complex multi-cellular organisms.

5. **\_\_\_\_\_\_\_\_\_\_\_ plants, animals, fungi, and protists are eukaryotic cells.**

**Summary**: Prokaryotic cells do not have a nucleus

& Eukaryotic cells do have a nucleus.

This allows eukaryotic cells to make multi-cellular organisms and perform more complex functions.