**Cell Structure Guided Notes**

***Discovery of Cells (write down what each discovered)***

1) Robert Hooke-

2) Leeuwenhoek-

***The Cell Theory:***

1)

2)

3)

***Modern Microscopes***



1) Confocal microscope-

2) Electron Microscope-



 Types of electron microscopes:

 Transmission (TEM)-

Scanning (SEM)-



***There are 2 main types of Cells: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Prokaryotic Cells***

NO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!!!!

**Characteristics of Prokaryotic cells:**

A)

 B)

 C)

 D)

E) Example:

***Eukaryotic Cells***

Have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!!!!

**Characteristics of Eukaryotic Cells**:

 A)

 B)

 C)

 D) Examples:



**Both prokaryotes and eukaryotes contain a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!**

***Eukaryotic Cell Structure***

**The 3 major parts of Eukaryotic Cells:**

**1)**

**2)**

**3)**

**Nucleus**

Nucleus-

Parts of the nucleus:

1)

2)

**Cytoplasm**

cytoplasm-

organelles-

**ORGANELLES IN THE CYTOPLASM OF EUKARYOTIC CELLS**

1) **Ribosomes**

 Structure:

 Function:

 Location:

2) Rough **endoplasmic reticulum (ER)**

 Structure:

 Function:

 Location:

3) Smooth **endoplasmic reticulum (ER)**

 Structure:

 Function:

 Location:

4) **Golgi apparatus**

 Structure:

 Function:

 Location:

5) **Lysosomes**

 Structure:

 Function:

 Location:

6) **Vacuoles**

 Structure:

 Function:

 Location:

7) **Mitochondria**

 Structure:

 Function:

 Location:

8) **Chloroplasts**

Structure:

 Function:

 Location:

9) **cytoskeleton**

 Structure:

 Function:

 Location:



Structures only found in plants (list 3):