**Matter:**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is anything that takes up space and has mass.
  + It cannot be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but transferred.
* Each element has an atom \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from any other element.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are the building blocks of matter

**Atoms:**

**Draw an example of an atom:**

* An atom has three parts:

|  |  |  |
| --- | --- | --- |
| Subatomic Particle | Charge | Symbol |
|  |  |  |
|  |  |  |
|  |  |  |

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are found in the center of the atom, a place called the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* \_\_\_\_\_ *\_\_\_\_\_\_\_\_\_\_\_* orbit the nucleus.

**Bohr Model:**

**Draw an example of a Bohr Model:**

* In the center:
  + Protons should have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ written on them.
  + Neutrons should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Electrons should have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + Electrons live in something called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
  + There is a maximum number of electrons per shell.

1st Shell= \_\_\_\_\_\_ Electrons 2nd Shell= \_\_\_\_\_\_ Electrons

3rd Shell= \_\_\_\_\_\_ Electrons 4th Shell= \_\_\_\_\_\_ Electrons

* + The electrons in the outer most shell of any element are called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.

**Modern Atomic Theory:**

**Sketch an example of the modern atomic theory:**

* + Electrons rotate around the nucleus at a speed that causes a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + The electron cloud is a cloud of varying \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ surrounding the nucleus.
  + The varying density shows \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.