**Parts of an Atom video notes**

1. **the smallest piece of matter is an atom**
2. **substances made of only one type of atom are elements**
3. **all matter is made of elements**
4. **copper is made of copper atoms**
5. **there are about 100 elements**
6. **chemical symbols are easier and shorter**
7. **compounds are two or more different elements; examples: water, carbon dioxide, salt, baking soda, vinegar**

**Particles that make up the ATOM**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particle** | **Where found** | **Atomic Mass** | **Charge** | **Information** |
| **Proton** | **In nucleus; center of atom** | **1 amu** | **+1**  **Positive** | **Determines the identity of an atom;**  **Atomic number** |
| **Neutron** | **In nucleus; center of atom** | **1 amu** | **0**  **neutral** | **Holds the nucleus together** |
| **Electron** | **Outside nucleus-**  **Electron cloud** | **1/2000 of proton or neutron** | **-1**  **Negative** | **Responsible for reactivity;**  **Easily shared;**  **Can move from one atom to another** |

* **a neutral atom has the same number of protons and electrons**
* **electrons are responsible for formation of molecules and compounds**

**Draw a simple diagram of the Atom**

