Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_ ASSIGN

**Practice with Atomic Structure**

**Identifying atomic structure:** For each atom below, say how many protons, neutrons, and electrons it has. Then, write its atomic number, atomic mass number, and the charge of the atom.

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Boron

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: \_\_\_\_\_\_\_\_\_\_Atomic Mass #: \_\_\_\_\_Charge: \_\_\_\_\_\_\_\_\_\_\_ |  | 1. Aluminum

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: \_\_\_\_\_\_\_\_\_\_Atomic Mass #: \_\_\_\_\_Charge: \_\_\_\_\_\_\_\_\_\_\_ |
|  | 1. Oxygen

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: \_\_\_\_\_\_\_\_\_\_Atomic Mass #: \_\_\_\_\_Charge: \_\_\_\_\_\_\_\_\_\_\_ |  | 1. Helium

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: \_\_\_\_\_\_\_\_\_\_Atomic Mass #: \_\_\_\_\_Charge: \_\_\_\_\_\_\_\_\_\_\_ |

**Draw an Atom:** Calculate the number of protons, neutrons, and electrons for each atom. Then draw the atom in the space provided. Write the charges inside the protons and electrons (see above).

|  |  |  |  |
| --- | --- | --- | --- |
|  | 1. Mercury

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: 80Atomic Mass #: 201Charge: +2 |  | 1. Krypton

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: 36Atomic Mass #: 84Charge: 0 |
|  | 1. Beryllium

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: 4Atomic Mass #: 9Charge: +2 |  | 1. Bromine

# protons: \_\_\_\_\_\_\_\_\_\_# neutrons: \_\_\_\_\_\_\_\_\_# electrons: \_\_\_\_\_\_\_\_\_Atomic #: 35Atomic Mass #: 80Charge: -1 |

**Chart:** Fill in the chart below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Atomic Number**  | **Atomic Mass #** | **# Protons** | **# Neutrons** | **# Electrons** |
| Helium  |  |  | 2 |  |  |
| Sulfur (-2) |  | 33 | 16 |  |  |
| Potassium -39 (+1) | 19 |  |  |  |  |
| Iodine (-1) | 53 | 127 |  |  |  |
| Silver |  | 108 | 47 |  |  |
| Cobalt – 59 (+2) | 27 |  |  |  |  |
| Lithium – 7 (+1) | 3 |  |  |  |  |

**Graphic Organizer:** Fill in the graphic organizer below. Use your Atomic Structure notes to help you.

**Summarize:** Summarize what YOU think is important to know about atomic structure.