Name:

# Parts of the Atom

1. A particular atom of argon contains 18 protons, 18 electrons and 22 neutrons.

a. What is the atomic number of this atom?

b. What is the mass number of this atom?

1. Determine the atomic number and mass number for elements containing these particles: Identify each element too.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Atomic #** | **Mass #** | **p+** | **n0** | **e-** |
|  |  |  | 47 | 61 | 47 |
|  |  |  | 82 | 125 | 82 |
|  |  |  | 8 | 8 | 8 |
|  |  |  | 11 | 12 | 11 |

1. Fill in the table below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Protons** | **Neutrons** | **Electrons** | **Mass #** | **Atomic #** |
| Chlorine-38 |  |  |  |  |  |
|  | 24 |  |  | 52 |  |
| $$$$ |  |  |  |  |  |
| Co-59 |  |  |  |  |  |
| $$$$ |  |  |  |  |  |
|  | 4 | 5 |  |  |  |
|  | 79 |  |  | 197 |  |

1. Use the periodic table to determine the number of electrons, neutrons and protons for the isotope of:

|  |  |  |  |
| --- | --- | --- | --- |
| **Isotope** | **Protons** | **Neutrons** | **Electrons** |
| **Boron-11** |  |  |  |
| **Carbon-14** |  |  |  |
| **Carbon-12** |  |  |  |
| **Uranium-238** |  |  |  |
| **Uranium-235** |  |  |  |