**Worksheet #10**

**Name: Period: Seat#:**

**Complete the following chart and answer the questions below:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element Name** | **Atomic Number** | **Number of Protons** | **Number of Neutrons** | **Number of Electrons** | **Mass Number** |
| carbon |  |  |  |  | 12 |
|  | 8 |  | 8 |  |  |
| hydrogen |  |  |  |  | 1 |
|  |  | 6 |  |  | 14 |
| hydrogen |  |  | 2 |  |  |
| nitrogen |  |  |  |  | 14 |
|  |  |  | 1 |  | 2 |
|  | 92 |  | 146 |  |  |
| cesium |  |  | 82 |  |  |
|  | 11 |  | 12 |  |  |
|  |  | 47 |  |  | 108 |
| tungsten |  |  | 110 |  |  |
|  |  |  | 45 |  | 80 |
|  |  | 24 |  |  | 52 |
|  |  |  | 89 |  | 152 |
| silver |  |  |  |  | 107 |
|  | 76 |  | 114 |  |  |

**Answer the following questions in full sentences.**

1. How are the atomic number and the number of protons related to each other? Support.
2. How do the number of protons, number of neutrons, and the mass number relate to each other? Explain.
3. What is the one thing that determines the identity of an atom (that is, whether it is an oxygen atom or a carbon atom, etc.)? Support.