**Topics – Test 3 Review**

1) List each of Dalton’s five laws and indicate whether or not they are true:

2) Fill out the blanks in this table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Protons** | **Neutrons** | **Electrons** | **Atomic mass** | **Atomic number** |
| F |  | 11 |  |  |  |
|  | 117 |  |  | 294 |  |
|  |  |  | 83 | 210 |  |
|  |  | 105 |  | 181 |  |
|  |  | 120 |  |  | 79 |
| Sr |  |  |  | 88 |  |

3) Define the term “average atomic mass”.

4) Element X has two isotopes: X-110 has a mass of 110 amu and an abundance of 68% X-112 has a mass of 112 amu and an abundance of 32%. Given this information, what is the average atomic mass of element X?

5) What is the difference between a line spectrum and a continuous spectrum?

6) Explain the process by which light is given off by an element when energy is added to it.

7) List three general properties of metals.