**Basic Atomic Structure Practice 1: *Name:***

**Protons, Neutrons, and Electrons Practice**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Atomic symbol  | Atomic number  |  Protons (Atomic Number)   |  Neutrons (Mass Number – Atomic Number)  |  Electrons (Same as protons if neutral atom)  | Mass Number (This is the atomic mass ROUNDED to the nearest whole number)  | Atomic Mass |
| B  | 5  | 5  | 6  | 5  | 11  | 10.81  |
|   | 11  |   |   |   | 24  |   |
|   |   | 31  | 37  |   |   |   |
|   |   |   |   | 39  | 89  |   |
|   |   |   | 35  |   |   | 63.5  |
|   |   | 43  |   |   | 100  |   |
| Pb  |   |   |   |   | 207  |   |
|   |   |   | 102  | 70  |   |   |
|   |   |   |   |   | 225  | 227  |
| Mo  |   |   | 53  |   |   |   |
|   | 81  |   |   |   | 206  |   |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Atomic symbol  | Atomic number  |  Protons (Atomic Number)   |  Neutrons (Mass Number – Atomic Number)  |  Electrons (Same as protons if neutral atom)  | Mass Number (This is the atomic mass ROUNDED to the nearest whole number) | Atomic Mass  |
|   | 100  |   | 159  |   |   |   |
| No  |   |   |   |   | 261  |   |
| Tm  |   |   |   |   | 170  |   |
|   |   | 106  | 159  |   |   |   |
|   |   |   |   |   | 22  | 20.2  |
|   |   |   |   | 19  | 39  |   |
|   | 2  |   | 2  |   |   |   |
| Ti  |   |   |   |   | 49  |   |
|   |   |   | 30  |   |   | 55.8  |
|   |   | 4  | 5  |   |   |   |
|   |   |   |   | 16  | 32  |   |
| V  |   |   | 28  |   |   |   |

**Solutions for the Protons, Neutrons, and Electrons:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Symbol  | Atomic #  | Protons  | Neutrons  | Electrons  | mass #  | A.Mass  |
| B  | 5  | 5  | 6  | 5  | 11  | 10.8  |
| Na  | 11  | 11  | 13  | 11  | 24  | 23.0  |
| Ga  | 31  | 31  | 37  | 31  | 68  | 69.7  |
| Y  | 39  | 39  | 50  | 39  | 89  | 88.9  |
| Cu  | 29  | 29  | 35  | 29  | 64  | 63.5  |
| Tc  | 43  | 43  | 57  | 43  | 100  | (98)  |
| Pb  | 82  | 82  | 125  | 82  | 207  | 207  |
| Yb  | 70  | 70  | 102  | 70  | 172  | 173  |
| Ac  | 89  | 89  | 136  | 89  | 225  | 227  |
| Mo  | 42  | 42  | 53  | 42  | 95  | 95.9  |
| Tl  | 81  | 81  | 125  | 81  | 206  | 204.4  |
| Fm  | 100  | 100  | 159  | 100  | 259  | 257  |
| No  | 102  | 102  | 159  | 102  | 261  | 259  |
| Tm  | 69  | 69  | 101  | 69  | 170  | 169  |
| Sg  | 106  | 106  | 159  | 106  | 265  | 263  |
| Ne  | 10  | 10  | 12  | 10  | 22  | 20.2  |
| K  | 19  | 19  | 20  | 19  | 39  | 39.1  |
| He  | 2  | 2  | 2  | 2  | 4  | 4.00  |
| Ti  | 22  | 22  | 27  | 22  | 49  | 47.9  |
| Fe  | 26  | 26  | 30  | 26  | 56  | 55.8  |
| Be  | 4  | 4  | 5  | 4  | 9  | 9.01  |
| S  | 16  | 16  | 16  | 16  | 32  | 32.1  |
| V  | 23  | 23  | 28  | 23  | 51  | 50.9  |