**Atomic Structure Practice**

Fill in the blank boxes with the correct information. Circle the numbers which are isotopes. Box the ions.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Element** | **Symbol** | **Atomic Number** | **Mass Number** | **# Protons** | **#** **Neutrons** | **# Electrons** |
| 1 | Hydrogen – 1 |  | 1 |  | 1 |  | 1 |
| 2 |  | $\begin{matrix}15\\7\end{matrix}$N |  |  | 7 | 8 |  |
| 3 | Aluminum – 27 |  |  | 27 |  |  | 13 |
| 4 |  |  |  |  |  | 45 | 36 |
| 5 | Uranium – 238 |  | 92 |  |  | 146 |  |
| 6 | Helium – 4 |  | 2 | 4 |  |  |  |
| 7 |  | $\begin{matrix}5\\2\end{matrix}$ He | 2 | 5 |  |  |  |
| 8 | Silicon – 28  |  |  |  |  |  |  |
| 9 |  |  |  |  | 38 | 51 |  |
| 10 |  |  | 77 | 196 |  |  |  |
| 11 | Lithium – 7(+ 1 cation) |  |  |  |  |  |  |
| 12 |  | $\begin{matrix}184\\74\end{matrix}$ W  |  | 184 |  |  |  |
| 13 |  |  |  |  |  | 79 | 54 |
| 14 | Magnesium – 25(+2 cation) |  |  | 25 |  |  |  |
| 15 |  |  |  | 12 | 6 |  |  |
| 16 | (-2 anion) |  |  | 82 | 34 |  |  |
| 17 | Antimony – 123(-3 anion) |  |  |  |  |  |  |
| 18 |  | $\begin{matrix}55\\25\end{matrix} $Mn |  |  |  |  |  |
| 19 | Mercury – 208 |  |  |  |  |  |  |
| 20 | (+3 cation) |  |  | 197 | 79 |  |  |