

1. Complete the following table for each isotope listed. *Note that the isotopic symbol should show the element symbol, the atomic number, the mass number, and the charge (if the charge is not zero). If the isotopic symbol is incomplete, please filling the missing parts.*

| | | | | | |
|----------------------|--------------------|----|---|--------------------------|------------------------------|
| Isotopic Symbol: | ${}^{71}\text{Ga}$ | Co | | ${}^{110}_{47}\text{Ag}$ | ${}^{77}_{34}\text{Se}^{2-}$ |
| Number of protons: | | | 5 | | |
| Number of electrons: | 28 | 24 | 5 | | |
| Number of neutrons: | | 33 | 7 | | |

2. The symbol for sodium is ____.
- Sm
 - S
 - So
 - N
 - Na
3. Atoms with same number of protons, but a different number of neutrons are called ____.
- Isotopes
 - Elements
 - Ions
 - Allotropes
 - Families
4. Based on the results of his gold foil experiment, Ernest Rutherford put forth the ____ model of the atom.
- atomic
 - nuclear
 - energy level
 - quantum mechanical
 - raisin-pudding (or plum pudding)
5. The mass number for an isotope is the sum of the number of ____.
- Protons and neutrons
 - Protons and electrons
 - Electrons and neutrons
 - Protons, neutrons, and electrons
 - Protons plus electrons minus neutrons