Electrons distribution Class 9
Sistla Name: Date:

1. Using a diagram, show the electron distribution for oxygen-16. Label the protons, neutrons, and electrons clearly.

2. Draw and distribute electrons for magnesium-24 (12 electrons). Show how the $2n^2$ rule applies and label the number of protons and neutrons in the nucleus.

3. Compare the electron distribution of neutral chlorine (Cl, 17 electrons) with the chloride ion (Cl^-). How many electrons are in each shell in both cases?

4. Isotopes have the same electron distribution but different nuclei. If two isotopes of hydrogen, hydrogen-1 (protium) and hydrogen-2 (deuterium), have 1 and 2 neutrons respectively, how would their diagrams differ?

5. If an element has 15 electrons, how would you distribute them across the shells using the $2n^2$ formula? Draw and label the distribution.