

Name: _____

Date: _____

Class/Period: _____

Ion Practice**Part I - Directions:** Read the questions below. Answer in the space provided.

1. An ion is a _____ particle formed from the loss/gain of a(n) _____.
2. A cation is a _____ charged particle formed from the _____ of an electron.
3. An anion is a _____ charged particle formed from the _____ of an electron.

Part II - Directions: Fill in the chart below using the information provided.

| <u>Ion Chemical Formula</u> | <u>Type of Ion</u> | <u>Type/# of particles lost/gained</u> | <u># p⁺</u> | <u># e⁻</u> | <u># n⁰</u> | <u>Atomic #</u> | <u>Mass #</u> |
|-----------------------------|--------------------|--|------------------------|------------------------|------------------------|-----------------|---------------|
| 4) | | gain 1 electron | | | 41 | | 76 |
| 5) Cd ⁺² | | | | | 68 | | |
| 6) | | | 27 | 24 | | | 60 |
| 7) | | | | 10 | | 7 | 15 |

Part III - Directions: Fill in the chart below using the information provided.

| <u>Isotopic Notation</u> | <u>Isotope Name</u> | <u>Atomic #</u> | <u>Mass #</u> | <u>Oxidation #</u> | <u># protons</u> | <u># neutrons</u> | <u># electrons</u> |
|--------------------------|---------------------|-----------------|---------------|--------------------|------------------|-------------------|--------------------|
| 8) | | | | -2 | | 33 | 18 |
| 9) $^{60}_{28}Ni^{+1}$ | | | | | | | |
| 10) | | | 58 | +2 | 26 | | |
| 11) | | 15 | 32 | -3 | | | |