

Name _____ Period _____ Date _____

Stability & Electron Configuration – Ch. 4

STABILITY & ION FORMATION

1. Write the shorthand electron configuration for copper.

| Symbol | # e ⁻ | Shorthand Electron Configuration |
|--------|------------------|----------------------------------|
| Cu | | |

2. Explain why copper does not follow the expected pattern.

Use the concept of full shell stability to predict the ions that will form from the following atoms. Then, name the isoelectronic noble gas and give the shorthand electron configuration for the ion (not the original atom).

| | Atom | Ion Symbol | Noble Gas | # e ⁻ | Shorthand Electron Configuration of Ion |
|----|------|------------|-----------|------------------|---|
| 3. | Br | | | | |
| 4. | Mg | | | | |
| 5. | S | | | | |
| 6. | Al | | | | |