

Periodic Table Worksheet 4

1. Use your periodic table to help in writing the electron configurations for the following elements

- Include the symbol for each element
- **You may use shorthand configuration**
- It may be helpful to refer back to the Aufbau diagram from Chapter 5
(but attempt to familiarize yourself with using the table as your source for energy levels)
- Identify similarities between the three elements by using your notes
- When necessary, use your trends to identify the required information

| | <i>Symbol</i> | <i>Electron Configuration</i> |
|---------------|---------------|-------------------------------|
| A. Phosphorus | _____ | _____ |
| Antimony | _____ | _____ |
| Nitrogen | _____ | _____ |

I. What is similar about all three of these elements? Briefly explain.

II. Identify what the expected trend would be for atomic size.

| | | |
|-----------|-------|-------|
| B. Cobalt | _____ | _____ |
| Zirconium | _____ | _____ |
| Cadmium | _____ | _____ |

I. What is similar about all three of these elements? Briefly explain.

Name _____ Period _____ Date _____

C. Carbon _____
Bromine _____
Argon _____

I. What is similar about all three of these elements? Briefly explain.

D. Rubidium _____
Strontium _____
Yttrium _____

I. What is similar about all three of these elements? Briefly explain.

II. Identify what the expected trend would be for electronegativity.

III. Identify what the expected trend would be for ionic size.

E. Boron _____
Arsenic _____
Silicon _____

I. What is similar about all three of these elements? Briefly explain.