

Date: _____

Name: _____

Electron Configurations

1. Predict the electron configuration of the following using **full notation**:

- | | |
|--------|--------|
| a) P: | f) Ar: |
| b) Ti: | g) K: |
| c) Co: | h) Cd: |
| d) Br: | i) Zr: |
| e) Sr: | j) Xe: |

2. Predict the electron configuration of the following using **core notation**:

- | | |
|--------|--------|
| a) Ca: | e) Mn: |
| b) Cs: | f) Cl: |
| c) Pb: | g) Na: |
| d) Ga: | h) Kr: |

3. Predict the electron configuration of the following ions, using **core notation**:

- | | |
|---------------------|---------------------|
| a) H ⁻ | f) Mn ²⁺ |
| b) Sr ²⁺ | g) Sb ³⁺ |
| c) Br ⁻ | h) Ge ²⁺ |
| d) N ³⁺ | i) Ge ⁴⁺ |
| e) Ti ²⁺ | j) Fe ³⁺ |

4. How many valence electrons do the following contain?

- | | |
|-------|---------------------|
| a) O | e) I ⁵⁺ |
| b) V | f) Zn ²⁺ |
| c) Xe | g) Tc ⁴⁺ |
| d) Te | h) O |

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