



CHEMISTRY

MR. THALER

A. Draw the **ELECTRON-ORBITAL DIAGRAMS** for the following atoms:

- | | | |
|-------------|-------------|-------------|
| 1. chlorine | 2. nitrogen | 3. aluminum |
| 4. oxygen | | |

B. Write the **ELECTRON CONFIGURATIONS** for the following atoms:

- | | | |
|--------------|-------------|-----------|
| 1. potassium | 2. vanadium | 3. cobalt |
| 4. zirconium | | |

C. Determine the number of **VALENCE ELECTRONS** in the atoms below:

- | | | |
|--------------|---------------|--------------|
| 1. fluorine | 2. phosphorus | 3. calcium |
| 4. nitrogen | 5. iron | 6. argon |
| 7. potassium | 8. helium | 9. magnesium |
| 10. sulfur | 11. lithium | 12. zinc |
| 13. carbon | 14. iodine | 15. oxygen |
| 16. barium | 17. aluminum | 18. hydrogen |
| 19. xenon | 20. copper | |

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