

STATION 1

CLASSIFYING ELEMENTS AND COMPOUNDS

Identify the following elements and compounds using the words provided:

Ionic compound, covalent compound, multivalent metal, polyatomic ion, metal ion, non-metal ion

1. Chromium _____
2. ScCl_3 _____
3. SF_6 _____
4. Neon _____
5. Nitrate _____
6. Ammonium _____
7. Vanadium _____
8. NO _____
9. Calcium chloride _____
10. Dihydrogen monohydride _____
11. Cobalt _____
12. Cyanide _____
13. Phosphide _____
14. Tungsten _____
15. Palladium _____

STATION 2

BOHR MODELS

Before bonding: draw **atoms**

Na Cl	O F F

After bonding: draw **compounds/molecules**

NaCl	OF ₂
Ionic / Covalent ? (circle one)	Ionic / Covalent ? (circle one)

STATION 3
NAMING COMPOUNDS

Write the names of these ionic or covalent compounds

1. CsBr
2. OF₂
3. CuCl₂
4. Cr₂(CO₃)₃
5. MnO₂
6. LiNO₃
7. P₄Cl₇
8. Mg₃(PO₄)₂
9. FeCl₃
10. Ca(HCO₃)₂

STATION 4
WRITING FORMULAS FOR COMPOUNDS

Write the formulas of these ionic or covalent compounds

1. Aluminum fluoride
2. Chromium (IV) oxide
3. Nickel (II) sulfate
4. Triphosphorus monobromide
5. Iron (III) phosphate
6. Sulfur tetraiodide
7. Lead (IV) hydroxide
8. Sodium sulfate
9. Nickel (III) acetate
10. Magnesium hypochlorite