Ionic and Covalent Compounds Worksheet—LAB MAKEUP

1. Ionic compounds are formed between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Covalent compounds are primarily formed between two \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. List the symbols for the seven diatomic molecules:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. In a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bond, valence electrons are shared.
5. In an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bond, electrons are lost and electrons are gained to form a compound.
6. The names of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ compounds contain prefixes that indicate the number of atoms of each element present.
7. When naming ionic compounds, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are used for metal ions that have more than one oxidation state.
8. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ion is made up of two or more elements.
9. A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a positively charged ion.
10. A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a negatively charged ion.

Name the following ionic compounds

1. Ca(OH)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. AlN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Pb(NO2)2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. NiS2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the formulas for the following ionic compounds

1. Boron Oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Magnesium Arsenate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Chromium III Phosphate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Mercury I Nitride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name the following covalent compounds

1. P2O5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. SiO2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. N10O4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the formulas for the following covalent compounds

1. diboron tetrabromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. carbon nonoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. octaphosphorus heptoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. trinitrogen monosulfide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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2. AlN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Pb(NO2)2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. NiS2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the formulas for the following ionic compounds

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2. Magnesium Arsenate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Chromium III Phosphate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Mercury I Nitride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name the following covalent compounds

1. P2O5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. SiO2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. N10O4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write the formulas for the following covalent compounds

1. diboron tetrabromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. carbon nonoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. octaphosphorus heptoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. trinitrogen monosulfide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_