



Section 4.2

Names and Formulas of Compounds

Study Notes

By the end of section 4.2 you should be able to understand the following:

- Ionic compounds are named using the cation + anion, and end with "ide", and the ratio of cations: anions is shown in the ionic formula
- Binary covalent compounds are named based on the number of atoms present in the compound
- Some covalent compounds have names that do not reveal their structure

NOTES

What are the three steps of naming ionic compounds?

1.

2.

3.

What are the four steps of writing formulas for ionic compounds?

1.

2.

3.

4.

NOTES

What is a multivalent metal?
What are the four steps to writing formulas ionic compounds containing multivalent metals? Write the chemical formulas for copper (I) chloride, and then copper (II) chloride.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

What are the six steps to naming ionic compounds containing multivalent metals?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

NOTES

What is a polyatomic ion? Write the formula, and give the names, of two examples of polyatomic ions.

1.

2.

3.

What are the five steps to writing the formula of ionic compounds containing polyatomic ions? Write the formula for the compound sodium sulphate.

1.

2.

3.

4.

5.

6.

NOTES

How is the chemical formula for a covalent compound written differently from an ionic compound?

1.

What is a binary covalent compound?
What are the three steps to naming binary covalent compounds?
What is the name of the binary covalent compound CBr_4 ?

1.

2.

3.

4.

5.

What are the three main tips that will help to differentiate between ionic and molecular compounds?

1.

2.

3.