

Chemistry IV - V Practice Quest /25

This practice test is designed to help you determine what concepts you DO know and more importantly what concepts you DO NOT know!

Go through the practice test THREE times:

(1) On your own (2) With your notes (3) With another student

1

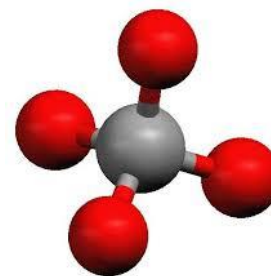
2

3

Each time, if you cannot answer a question, draw a circle around it to identify that you should review this concept when preparing for the test.

- Elements are held together by chemical bonds. Which of the following is *not* an event that produces a chemical bond?
 - Two atoms come together and share an electron
 - One atom gains an electron from another atom
 - Two atoms come together to gain an electron
 - One atom loses an electron to another atom
- Which of the following is the correct formula for iron (II) oxide?

a. Fe ₂ O	c. FeO ₂
b. FeO	d. Fe ₂ O ₂
- The following molecule has one carbon atom (light) and four hydrogen atoms (dark). The molecule shown is
 - A molecular compound
 - An ionic compound
 - A molecular atom
 - An ionic atom
- The subscripts in ionic compound formulas
 - Identify the total number of atoms in the element
 - Identify the definite proportions of elements in the compound
 - Identify the types of elements in the compound
 - Identify the definite proportions of molecules in the element
- The roman numeral in a name represents
 - The number of molecules in the compound
 - The charge of the polyatomic ion
 - The charge of the multivalent ion
 - The charge of the compound
- Which of the following is a proper rule for naming ionic compounds?
 - The non-metal ion's name always ends with the suffix "-ide"
 - The chemical name of an ionic compound always has three parts
 - The second part of the chemical name is always a positive ion
 - The metal ion's name always ends with the suffix "-ide"



Short Answer

7. Draw Bohr models for the following (5 marks)

Before bonding: draw **atoms**

Mg O	O F F

After bonding: draw **compounds/molecules**

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

8. Complete the following table identifying the name, formula, or ion (4 marks)

Formula	Name	Positive Ion	Negative Ion
	Calcium sulphate	Ca ²⁺	
KBr			
	Copper (II) chloride		

9. Name the following compounds (5 marks)

- a. NaBr _____
- b. Sc(OH)₃ _____
- c. V(SO₄)₂ _____
- d. N₃Cl _____
- e. CaCO₃ _____

10. Write the formula for the following compounds (5 marks)

- a. Silver phosphate _____
- b. Sulfur tribromide _____
- c. Tin (IV) sulfide _____
- d. Titanium (IV) cyanide _____
- e. Potassium permanganate _____