Year 10 Science: Chemical bonding: ions, ionic bonds and covalent bonds

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Is N_2 a molecule, a compound, both or neither? Explain.

2. How many atoms of each element are in one formula unit of $Ca(OH)_2$?

3. Write the formula of the ion formed by potassium (2,8,8,1) and by sulfur (2,8,6).

4. Write the formula of magnesium oxide and of sodium carbonate.

5. Explain why chlorine atoms bond covalently in Cl_2 but ionically with sodium.

Fix the mistake

6. Correct this statement: "Chlorine gains an electron, so it becomes Cl^+."

7. Correct this statement: "Magnesium oxide is Mg_2O_2, because magnesium loses 2 and oxygen gains 2."

8. Correct this statement: "Calcium nitrate is $CaNO_{32}$."

9. Correct this statement: "Salt is made of NaCl molecules."