

RQ for Covalent Compounds

Name: _____

Date: _____

- Carbon reacts with chlorine to form CCl_4 . What is the name of this compound?
 - carbon 4-chloride
 - 1-carbon 4-chloride
 - tetracarbon chloride
 - carbon tetrachloride
- Which is the correct formula for dinitrogen pentoxide?
 - N_4O
 - NO_2
 - N_2O_5
 - NO_4
- Which of the following is NOT a diatomic molecule?
 - H_2
 - Cl_2
 - CaI_2
 - Br_2
- How many covalent bonds can nitrogen form?
 - 1 covalent bond
 - 2 covalent bonds
 - 3 covalent bonds
 - 4 covalent bonds
- What is the chemical formula for dinitrogen monoxide is more commonly known as laughing gas?
 - NO_2
 - N_2O
 - N_2O_2
 - NO
- Which statement *best* describes the atoms of elements that form compounds by covalent bonding?
 - They share electrons between them.
 - They have a large difference in atomic mass.
 - They are in the same period in the periodic table.
 - They have a large difference in valence electron number.

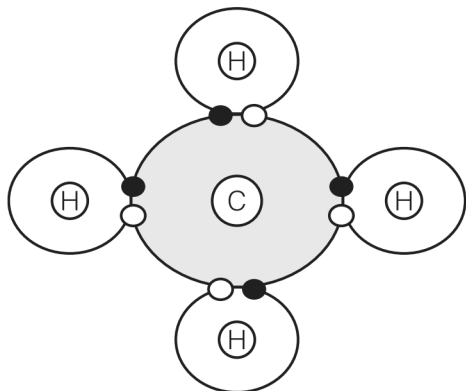
- Which compound is *most likely* formed using covalent bonds?
 - CO_2
 - K_2O
 - KBr
 - CaBr_2
- SO_2 is a colorless gas with a very strong odor similar to that of a just struck match. It is a common form of air pollution that contributes to the formation of acid precipitation as it is released from coal burning plants.

What is the chemical name for SO_2 ?

 - Monosulfur dioxide
 - Sulfur oxide
 - Sulfur dioxide
 - Monosulfide dioxide
- All living things contain which element?
 - helium
 - sodium
 - copper
 - carbon

10. The diagram shows a model of a methane molecule, which has the formula CH_4 .

Model of Methane (CH_4)



Which phrase correctly describes the relationship of the carbon and hydrogen atoms in a methane molecule?

- A. They are held together by ionic bonds.
- B. They share electrons to form covalent bonds.
- C. They bond to each other since all nuclei are positively charged.
- D. They are attracted to each other since the nucleus of each atom contains neutrons.