

Name

KEY

Date

22.3 Covalent and Metallic Bonds/Naming Covalent Compounds Quiz (50 points)

Multiple Choice: Write the CAPITAL letter of the correct choice in the space provided (10 points)

D 1. A covalent bond

A. forms between two nonmetals

B. is the attraction of an atom's nucleus for a pair of shared electrons

C. may be single, double, or triple

D. all of the aboveD 2. Which of the following is NOT an example of a covalent compound?A. SO₂B. H₂OC. SiF₄D. RaSD 3. How many bonds will germanium make?

A. 1

B. 2

C. 3

D. 4B 4. A double covalent bond

A. is when atoms share 2 electrons

B. is when atoms share 2 pairs of electrons

C. is not as strong as a single covalent bond

D. is not possible

D 5. Which of the following is NOT an example of a diatomic element?

A. hydrogen

B. oxygen

C. nitrogen

D. helium

6. Name the following covalent compounds (6 points):

~~.0~~ _____BF₃ boron trifluorideCO₂ carbon dioxideNO₂ nitrogen dioxideN₂S dinitrogen monosulfideH₂O dihydrogen monoxide

7. Name the 7 diatomic molecules. Write out the entire name, spelling counts (7 points)

Bromine

Chlorine

Fluorine

Iodine

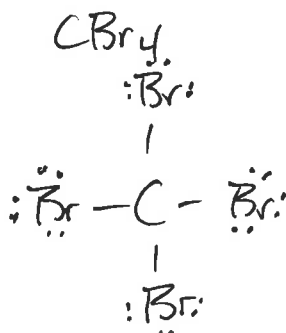
Hydrogen

Nitrogen

Oxygen

8. For each of the following compounds, 1) write the formula (1 points) 2) draw a Lewis structure using a line to show pairs of shared electrons (3 points). (20 points)

a. Carbon tetrabromide



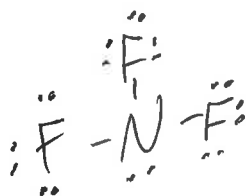
b. sulfur dichloride SCl_2



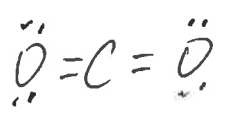
c. diatomic oxygen



d. nitrogen trifluoride



e. carbon dioxide



7. Matching (6 points)

- D bond that forms when atoms share one or more pairs of electrons.
- E smallest unit of a substance that still keeps the properties of the substance.
- B model used to show the valence electrons of an atom.
- C molecules made of two atoms.
- A bond formed by the attraction between positively charged metal ions and the electrons around them.
- F ability of metal to be hammered into sheets.

- ~~A~~ metallic bond
- ~~B~~ electron-dot diagram (Lewis structure)
- ~~C~~ diatomic molecule
- ~~D~~ covalent bond
- ~~E~~ molecule
- ~~F~~ malleability

Pledge: _____