



Chemistry

Name: _____

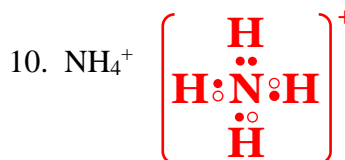
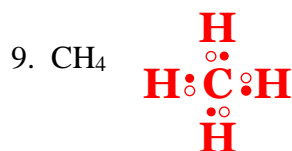
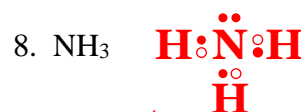
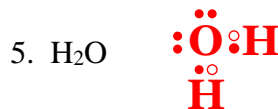
Section _____

COVALENT BONDING WS

Date: _____

Covalent Bonding

Directions: Show covalent bonding in each of the following by drawing Lewis electron dot diagrams. Multiple bonds occur in some of the molecules.



Directions: Classify each of the following as an atom, a diatomic molecule, or a molecule.



Directions: Answer the following questions.

2. How many electrons are shared in the bond in an O₂ molecule? four, 4, or 2 pair.

3. How is a coordinate covalent bond different from other covalent bonds?

Both electrons in a coordinate covalent bond originate from the same atom.

4. How many bonds can each of the following atoms form?

C four O two Cl oneN three H one5. How many electrons are shared in the bond in an N₂ molecule? six, 6, or 3 pair.

6. Characterize each of the following bonds as polar or nonpolar.

HCl polar NH₃ polar H₂O polarCO₂ polar N₂ nonpolar CH₄ polar