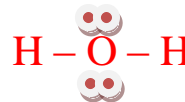
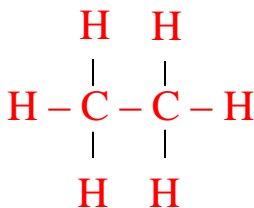
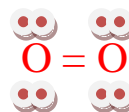


1. Write Lewis structures for the following molecules: (4 pts)

a) I₂b) H₂Oc) C₂H₆d) O₂

2. Classify each of the following bonds as ionic, covalent, or polar covalent. (4 pts)

a. C-H

$$2.5 - 2.1 = 0.4$$

Polar covalent

b. Se-O

$$3.5 - 2.4 = 1.1$$

Polar covalent

Electronegativity

Atom	Value
C	2.5
H	2.1
Se	2.4
O	3.5
Br	2.8

c. H-Br

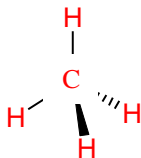
$$2.8 - 2.1 = 0.7$$

Polar covalent

d. C-O

$$3.5 - 2.5 = 1.0$$

Polar covalent

3. Indicate both the electron geometry and molecular shape of CH₄. (2 pts)

Electron geometry = tetrahedral
Molecular shape = tetrahedral