

Worksheet: Bond Polarity, Molecular Polarity

1. Identify the types of bonds in the following compounds:

a. Na—Cl _____

b. Cl—As _____

c. C—S _____

d. O—K _____

e. N—N _____

f. Li—O _____

g. C—O _____

h. P—Br _____

2. Explain the difference between nonpolar and polar covalent bonds.

3. Identify the following compounds as polar or nonpolar:

a. H₂O _____

b. Cl₂ _____

c. NF₃ _____

d. CS₂ _____

e. SiCl₄ _____

f. O₂ _____

g. CH₄ _____

h. HCl _____

4. Explain why a molecule can have polar bonds but can be nonpolar overall.