

## WORKSHEET ON COVALENT BONDING AND POLARITY

For each of the substances below provide the information requested in 1-4.

1. Write the dot structure and the structural formula.
2. Label each pair of electrons on the central atom as a lone pair or involved in a single bond, double bond or triple bond.
3. Mark the dipole moment of each polar bond on the structural formula.
4. For the substances that are covalently bonded molecules, make a prediction about whether the molecule as a whole will be polar and explain your decision.

HF

CH<sub>2</sub>Br<sub>2</sub>

IF<sub>3</sub>

CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>

NH<sub>3</sub>

K<sub>2</sub>CO<sub>3</sub>