Molecular Shape and Polarity Worksheet Answers

Chemical Formula	Chemical Name	Types of Bonds Present	Name of Shape	Polar Molecule (Y/N)
O_2	Oxygen gas	Double nonpolar covalent	linear	Yes No, no polar bonds
BCl_3	Boron (III) trichloride Boron trichloride	Polar covalent	Trigonal pyramidal Trigonal planar	Yes No, bond dipoles cancel
PH_3	Phosphorous (III) hydride Phosphorus trihydride	Nonpolar covalent	Triangular planar Trigonal pyramidal	No
SCl_2	Sulphur dichlorine Sulphur dichloride	Double polar covalent Single polar covalent	bent	No Yes, bond dipoles do not cancel
MgO_2 MgO	Magnesium (II) Oxide Magnesium oxide	Polar covalent ionic	Tetrahedral Not a molecule, it is ionic, makes a shape when many MgO make up a crystal	No Ionic (charged)
SiS_2	Sulphur silicon Silicon disulphide	Polar covalent	Linear bent linear	No
CI_4	Carbonous iodide Carbon tetraiodide	Polar covalent Nonpolar covalent	tetrahedral	Yes No, no polar bonds
$SeCl_2$	Selenium IIV) chloride Selenium (II) chloride	Nonpolar covalent Polar covalent	Trigonal pyramidal Linear bent or just bent	No Yes, bond dipoles do not cancel