1 The central atom of H2S and H2O each has steric number 4, and so the geometry about the central atom is tetrahedral and the shape of the molecule is bent. Which bond, H-S or H-O, is more polar?

A H-S
B H-O
C The bonds are of equal polarity

2 Which molecule, H2S or H2O, is more polar?

A H2S
B H2O
C The molecules are of equal polarity

3 The central atom of CO2 and CS2 each has steric number 2, and so the geometry about the central atom is linear and the shape of the molecule is linear. Which bond, C-S or C-O, is more polar?

A C-S
B C-O
C The bonds are of equal polarity

4 Which molecule, CS2 or CO2, is more polar?

A CS2
B CO2
C The molecules are of equal polarity

5 The central atom of BH3 and BF3 each has steric number 3 (octet deficient), and so the geometry about the central atom is trigonal planar and the shape of the molecule is trigonal planar. Which bond, B-H or B-F, is more polar?

A B-H
B B-F
C The bonds are of equal polarity

6 Which molecule, BH3 or BF3, is more polar?

A BH3
B BF3
C The molecules are of equal polarity

7 The central atom of NH3 and NF3 each has steric number 4, and so the geometry about the central atom is tetrahedral and the shape of the molecule is trigonal pyramid. Which bond, N-H or N-F, is more polar?

A N-H
B N-F
C The bonds are of equal polarity

8 Which molecule, NH_3 or NF_3, is more polar?

A NH_3
B NF_3
C The molecules are of equal polarity