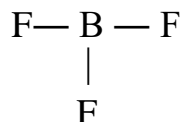


Name: _____ Date: _____ Period: _____ Seat #: _____

Referring to your electro-negativity worksheet, consider the molecule BF_3 .

The B-F bond is classified as _____ (Ionic/Polar-Covalent/Non-Polar Covalent)

(If applicable, correctly place the symbols δ^+ and δ^- in the molecule)

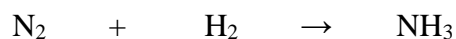


Based on VSEPR theory, what shape would you assign to the molecule, BF_3 ?

The molecule, BF_3 , is _____ (polar/non-polar)

Explain the reasoning for your answer:

Balance the following equation and calculate the Energy of Formation (ΔH_f) of NH_3 using the bond energies provided. Write the energy term on the correct side of the equation.



This reaction is _____ (endothermic/exothermic).

Table 9.9 • Some Average Single- and Multiple-Bond Energies (kJ/mol)

	H	C	N	O	F	Si	P	S	Cl	Br	I
H	436	413	391	463	565	318	322	347	432	366	299

Multiple Bonds $\text{N} \equiv \text{N}$ 945