Molecular Structure Lab Make-Up

II. Purpose: To model covalently bonded molecules to better understand their geometries and symmetries.

III. Procedure:
        1. Access the virtual molecules site linked on our website, chose the "Model" option on the left, and familiarize
            yourself with how it works
        2. For each molecule:
            a. Draw the Lewis Dot Structure
            b. From the LDMS build a model of the molecule
            c. Sketch the model in the space provided
            d. Fill in the remaining information for each molecule

IV. Data

Compound	LDMS	Drawing	DG	MG	Angle	Symet-rical?
H_2O						
CH_2O						
$BrCN$						
CH_2Cl_2						
CF_4						

IV. Data Continued.......

Compound	LDMS	Drawing	DG	MG	Angle	Symet-rical?
HClO						
HF						
SO_4^{2-}						
SiO_2						
CO_2						
NI_3						

VI. Conclusions

How do we determine the domain geometry of a central atom in a molecule? How do we determine the molecular geometry of a central atom in a molecule? What is true of the central atom if domain and molecular geometries of the molecule are the same?

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