

Molecule Building Simulation

Name _____

Block _____

- 1) Find the website for PHET simulations.
- 2) Open the program entitled "Molecule Shapes" under Chemistry Programs.
- 3) Draw the Lewis diagram of the following molecules before building them on the simulation.
- 4) Build the molecules on the simulation (make sure to include lone pairs of electrons on the central atom)
- 5) Check the boxes for "Molecule Geometry" and "Show bond angles" and fill in the following table. Give a brief sketch of 3-D drawing.
- 6) Predict whether the molecule is polar or not. (polar = uneven distribution of charges in a molecule.)

Molecule	Lewis Diagram	Bond ^o	Shape Name	3-D Drawing	Polar?
H ₂					N
ClF ₃					Y
XeF ₄					N
H ₂ O					Y
SF ₆					N
HCN					Y
CH ₂ O					Y