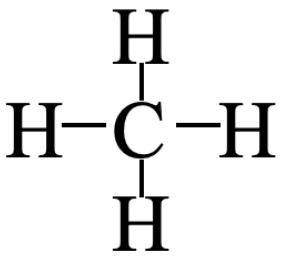
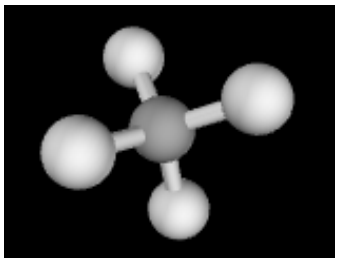
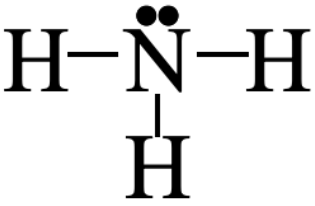
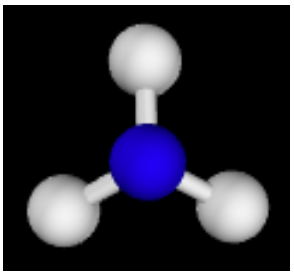
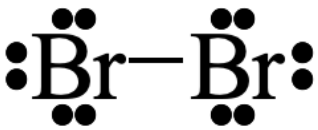
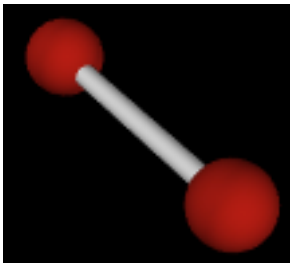
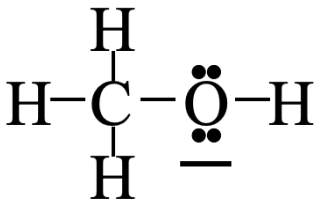
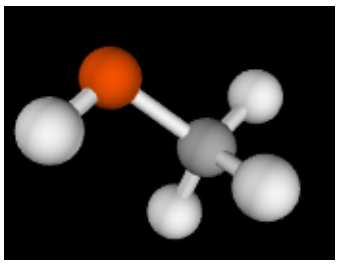
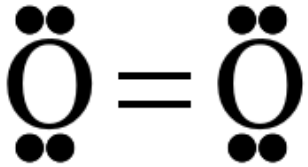
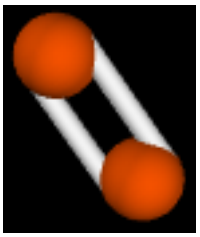
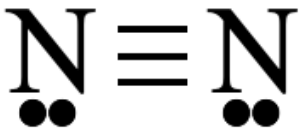
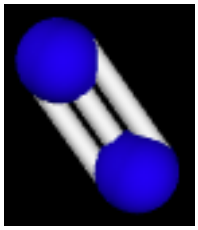
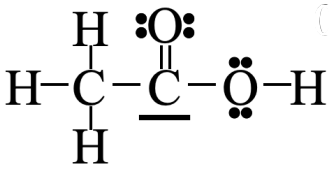
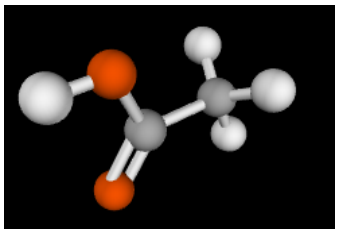
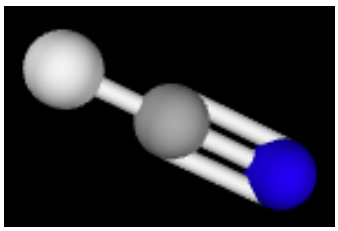
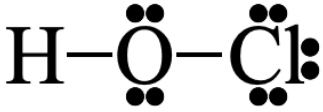
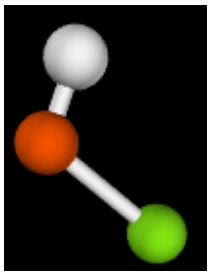
Build a Molecule Activity

Name:

Class:

1. Using the LDMS homework 3 & 4, draw in the LDMS for each of the molecules.
2. Go to phet.colorado.edu/en/simulations/build-a-molecule click on the play symbol to open the activity.
3. Click on "Playground"
4. Use the "buckets" of atoms to build the the molecules in the chart. Click the arrows to access different atom combinations. Drag and drop the atoms into the space above the buckets to "build" molecules based on their LDMS.
5. Once the molecule is correctly built, its common name will appear. Write its common name.
6. Click "3D" to see its shape. Draw its shape.

Molecule	LDMS	Drawing of 3D molecule	Common name
CH_4 Domain: Molecular: Angle:			methane
NH_3 Domain: Molecular: Angle:			ammonia
HF Domain: Molecular: Angle:			hydrogen fluoride
Br_2 Domain: Molecular: Angle:			molecular bromine

Molecule	LDMS	Drawing of 3D molecule	Common name
CH_3OH Domain: Molecular: Angle:			methanol
O_2 Domain: Molecular: Angle:			molecular oxygen
N_2 Domain: Molecular: Angle:			molecular nitrogen
CH_3COOH Domain: Molecular: Angle:			acetic acid
HCN Domain: Molecular: Angle:			hydrogen cyanide
HClO Domain: Molecular: Angle:			hypoclorous acid

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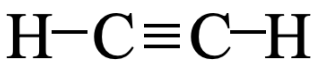
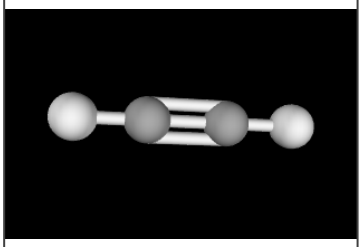
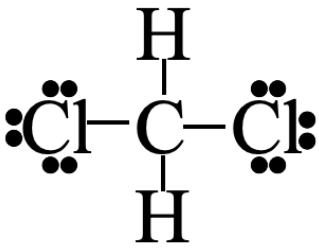
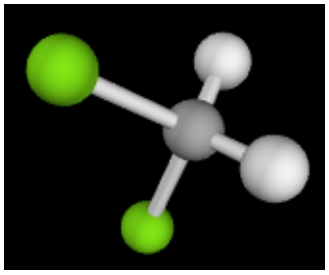
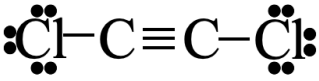
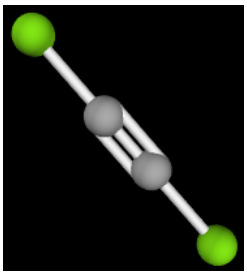
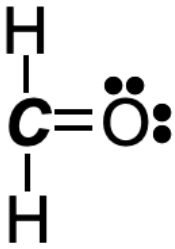
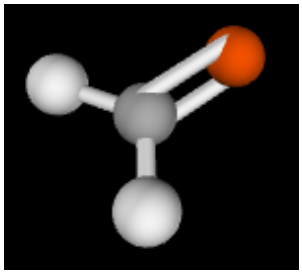
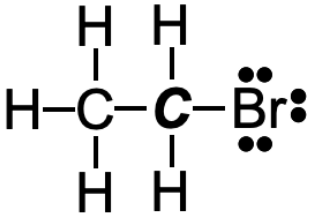
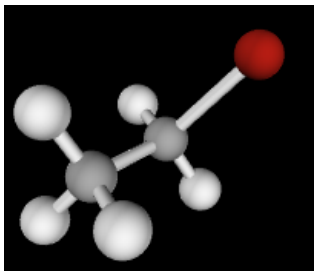
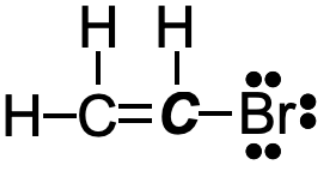
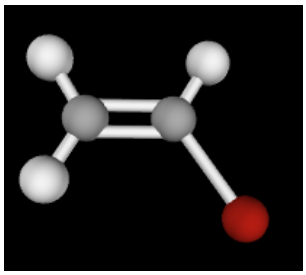
C_2H_2 Domain: Molecular: Angle:			acetylene
CH_2Cl_2 Domain: Molecular: Angle:			dichloromethane
C_2Cl_2 Domain: Molecular: Angle:			1,2-dichloroacetylene
CH_2O Domain: Molecular: Angle:			formaldehyde
CH_3CH_2Br Domain: Molecular: Angle:			bromoethane
CH_2CHBr Domain: Molecular: Angle:			bromoethylene

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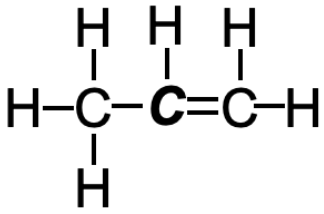
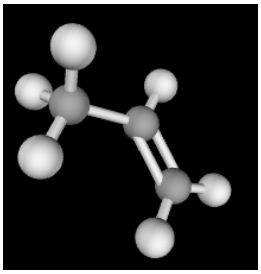
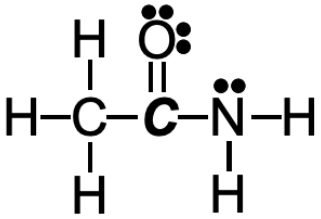
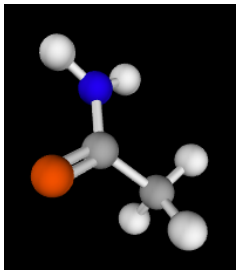
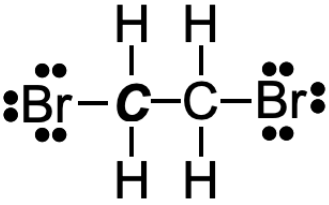
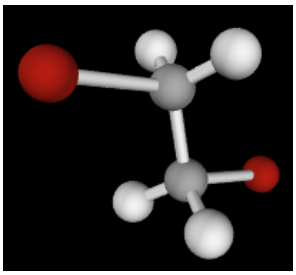
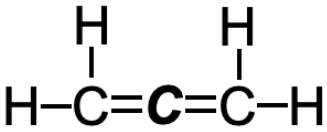
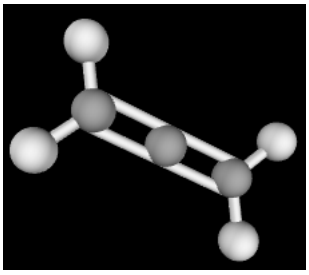
CH_3CHCH_2 Domain: Molecular: Angle:			prop-1-ene
CH_3CONH_2 Domain: Molecular: Angle:			acetamide
$C_2H_4Br_2$ Domain: Molecular: Angle:			1,2-dibromoethane
CH_2CCH_2 Domain: Molecular: Angle:			allene