Activities

For each molecule, begin by drawing the lewis dot structure and any bond dipoles. Identify the number of electron dense regions (steric number) for each. Next, draw a the molecule with perspective using the wedge and dash convention and identify any overall dipole moment. Label your drawing with both the *electron-pair geometry* and *molecular geometry*.

CH_4

NH_3

H_2O

SO_2

NH_4^+

CH_2O

$TeCl_4$

XeF_2

BrF_5

ICl_4^-

SF_6

PF_5

Build each of the following molecules using the molecular model kits. Draw each using the wedge and dash convention. Fill in any lone pairs where present.

$H_3C—CH_2$
$\quad\quad\quad\diagdown$
$\quad\quad\quad C{\equiv}CH$

$H_3C—CH_2$
$\quad\quad\quad\diagdown$
$\quad\quad\quad C—CH_3$
$\quad\quad\diagup\diagup$
$\quad\quad O$

$H_3C—S—CH_3$