

Molecule Shapes

Learning Goals: Students will be able to:

- Identify substances to which “Molecular geometry” applies.
- Name molecule and electron geometries for basic molecules.
- Explain the model being used to predict molecule geometry.
- Predict common molecular geometry from the number of electron pairs and bonded atoms around a central atom of basic compounds.

by Trish Loeblein updated October 2011

1. Which is a molecule?



2. Which would have a linear shape?



C. Both are linear

3. Which has only single bonds?



C. Both have all single bonds

4. What shape is water?

A. Tetrahedral

B. Bent

C. Trigonal planar

D. Linear

5. Which is an example of an exception to the octet rule?



E. More than one of these

5ans. Which is an example of an exception to the octet rule?

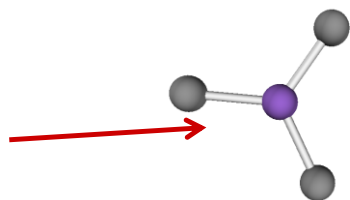
A. O_2

B. N_2

C. BF_3

D. I_2

E. More than one of these



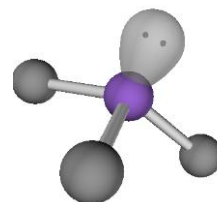
6. Which molecule could be represented with this diagram?

A. BH_3

B. CH_4

C. NH_3

6b. What would the structural formula look like?



7. Which molecule could be represented with this diagram?

A. HCl

B. CH_4

C. NH_3

D. F_2

7b. What would the structural formula look like?

