

Name: _____ Period: _____ Date: _____ Score: _____

POLARITY ACTIVITY

The purpose of this activity is to help students identify polar bonds and polar molecules through the use of three dimensional models. To assess whether a molecule is polar several things must be considered: a) symmetry of the molecule b) position of lone pair electrons and the c) presence of polar bonds.

Based on the models 1-25 provided do the following:

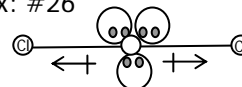
1. Use the appropriate box that matches the model number
2. **Draw a replica** of the model (stick figure)
3. Identify any polar bonds by **drawing vector arrows**
4. Label as a **symmetrical** or **unsymmetrical** molecule
5. Circle any **lone pair electrons** on the central atom
6. Determine if it is a **Polar** or **Nonpolar** Molecule
7. Label the **Molecular Geometry** of each structure

For simplicity all molecular models should be regarded with the following identity of the attachments: (disregard any empty holes)

White = hydrogen Green = chlorine White nubs=lone pair electrons

All Central Atoms should be considered to be phosphorus

Ex: #26



symmetrical - linear - nonpolar

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.
16.	17.	18.	19.	20.
21.	22.	23.	24.	25.