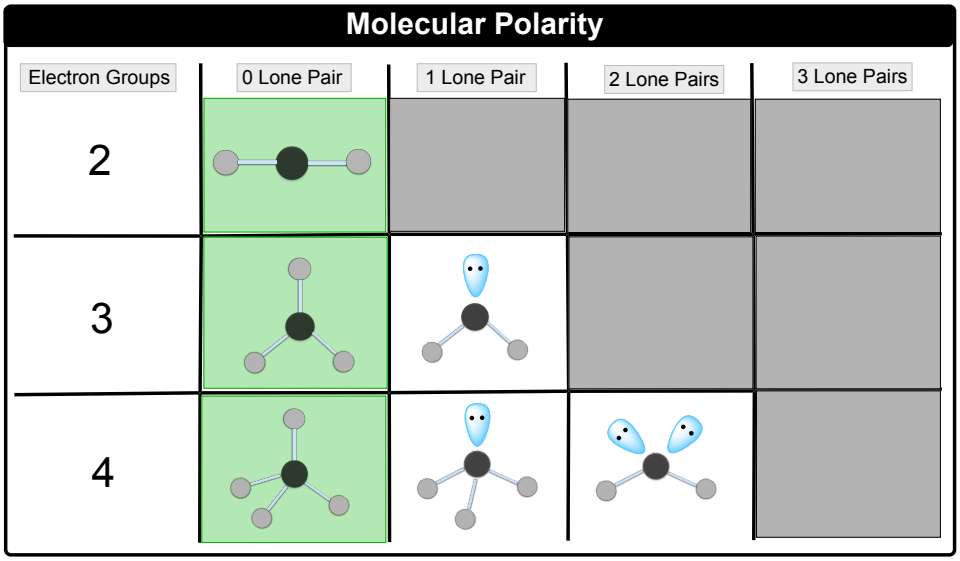
CONCEPT: MOLECULAR POLARITY (SIMPLIFIED)

Molecular Polarity & Perfect Shapes

- Recall, polarity of chemical bonds arises from _____ sharing of electrons between atoms based on electronegativity.
  - □ **Molecular Polarity:** Polarity that arises for an entire _____ molecule.
  - □ **Nonpolar Molecule:** Any hydrocarbon and any non-hydrocarbon with a *perfect shape*.
    - **Perfect Shape:** When the central element has _____ lone pairs and the _____ surrounding elements.
  - □ **Polar Molecule:** Any Lewis Dot Structure that doesn't have a perfect shape.



EXAMPLE: Determine if carbon dioxide, CCl_4, is polar or nonpolar.

PRACTICE: Determine if the compound of BCl_2F is polar or nonpolar.

CONCEPT: MOLECULAR POLARITY (SIMPLIFIED)

PRACTICE: Determine if phosphorus trihydride, PH_3, is polar or nonpolar.

PRACTICE: Determine if difluorine selenide, F_2Se, is polar or nonpolar.

PRACTICE: Determine if carbon dioxide, CO_2, is polar or nonpolar.