

## Bellringer: March 1st

1. How are ionic and covalent compounds different? (list at least 3 differences)
2. How are they similar?  $e^-$ -ide, nonmetals
3. What is electronegativity?

I ability to attract  $e^-$

transfer  $e^-$       Shares  $e^-$

M+n                  n+n

R.N                  prefixes

## Friday March 1st

**Objective: Students will determine the polarity of chemical compounds**

1. Bellringer
2. Polarity Notes
3. HW Questions
4. Worktime

**Due: Lab, Current Event, Solutions, Solubility Practice**  
**Homework: Polarity Practice**

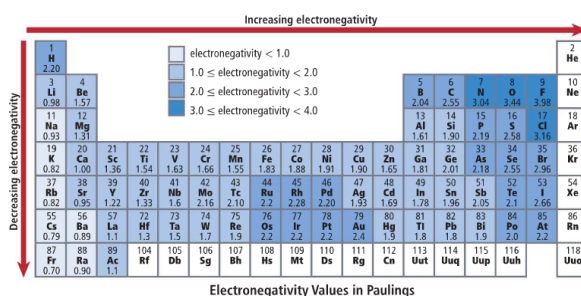
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## Vocab Review

- **Ionic Compounds** – contain ionic bonds formed by a transfer of electrons between atoms
- **Covalent Compounds** – contain covalent bonds formed by sharing electrons between atoms
- **Electronegativity** – the ability of an atom to attract electrons to itself while bonded to another atom
  - > Can be used to determine bond polarity as we did first semester.

Apr 8-7:43 AM

## Electronegativity



Apr 8-8:44 AM

## Polar vs. Nonpolar

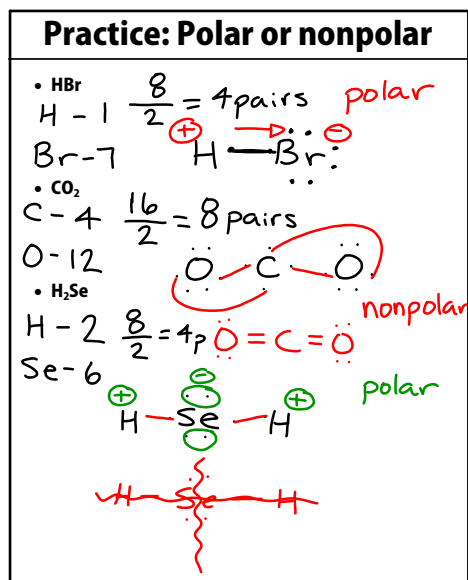
- **Polar Covalent Molecule** - one in which the molecule is *asymmetrical* and causes the centers of the positive and negative poles (dipoles) to not align.
  - > Results in a partial positive charge and partial negative charge on the molecule
- **Nonpolar Covalent Molecule** - one in which the molecule is *symmetrical* which causes the centers of the positive and negative poles (dipoles) to align.

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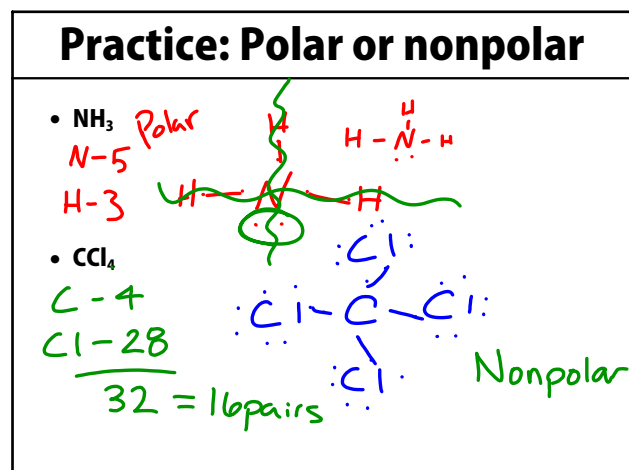
## Determining Polarity

- Use Lewis structures!
- Bond polarity (electronegativity greater than 0.4)
- Have to draw the molecules to determine symmetry
  - Symmetrical molecules = **nonpolar covalent**
    - r All terminal atoms must be the same
    - r Usually no lone pairs on the central atom
  - Asymmetrical molecules = **polar covalent**
    - r All terminal atoms may not be the same
    - r Usually lone pairs present on the central atom

Apr 8-7:43 AM



Apr 8-7:43 AM



Apr 8-7:43 AM

## Attachments

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solutionSalt.zip

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