

Name: _____

Key

Date: _____

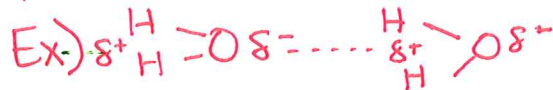
Hour: _____

Intermolecular Forces

1. What is the difference between a covalent bond and intermolecular forces? Give an example of each.

Covalent bond is share electrons between atoms.
Ex.) H_2O

IMF is an attraction between molecules.



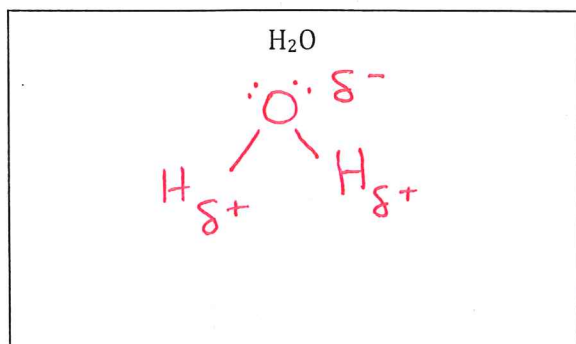
2. Is an intermolecular force more similar to an ionic bond or a covalent bond? Justify your answer.

Ionic bonds, have attractions between positive and negative charges like ions, just not as strong.

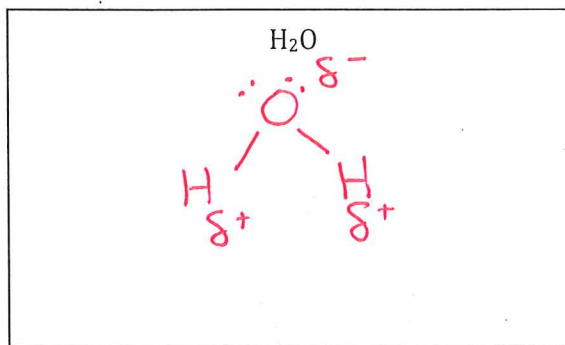
For each pair of molecules below do the following:

- Draw each molecule with the correct shape
 - If there's an ion just draw the ion with the correct charge
- Indicated any slightly negative or slightly positive ends of the molecule on your drawing
- Indicate whether each molecule is polar or nonpolar
- Indicate the most important intermolecular force between the two molecules

3. H_2O and H_2O



Polar or Nonpolar

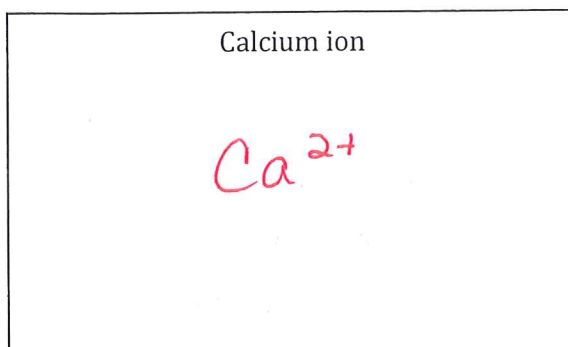
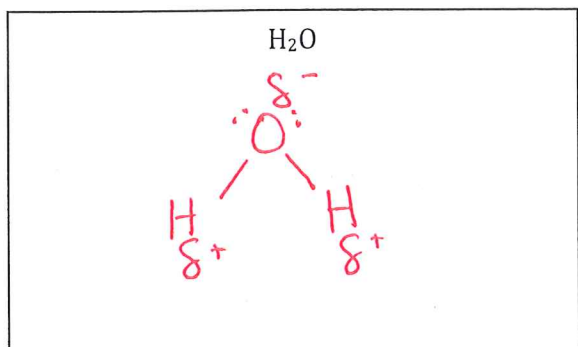


Polar or Nonpolar

Most important intermolecular force: _____

Hydrogen Bonding

4. H₂O and Calcium ion

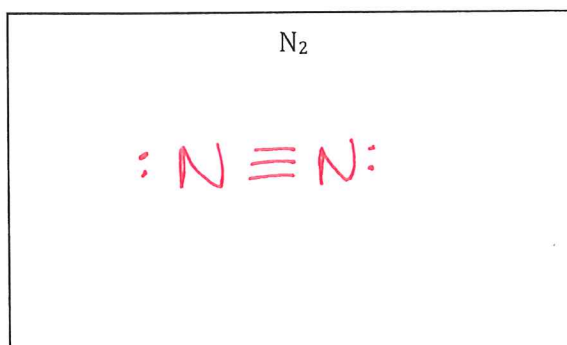
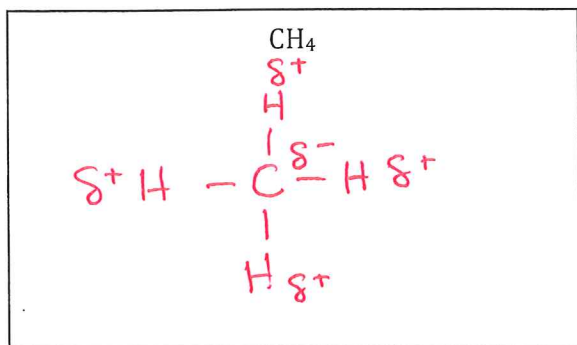


Polar or Nonpolar

~~Polar~~ or ~~Nonpolar~~

Most important intermolecular force: Ion - Dipole

5. CH₄ and N₂

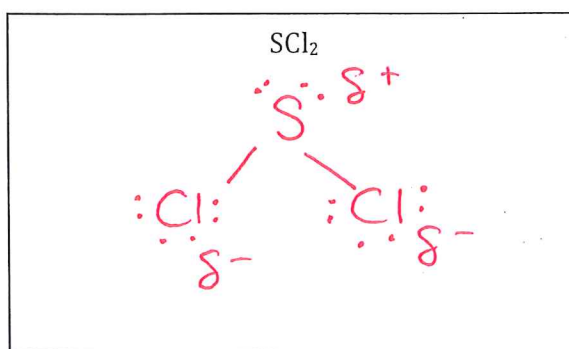
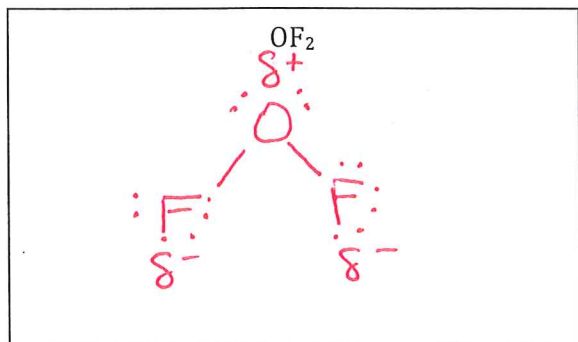


Polar or Nonpolar

Polar or Nonpolar

Most important intermolecular force: Dispersion

6. OF₂ and SCl₂



Polar or Nonpolar

Polar or Nonpolar

Most important intermolecular force: Dipole - Dipole