Solubility:

1. [Molecule 1] (solute-solute) intermolecular forces are: …
2. [Molecule 2] (solvent-solvent) intermolecular forces are: …
3. The solute-solvent forces of attraction are: …
4. These are (not) strong enough to overcome the solute-solute and solvent-solvent intermolecular forces so [Molecule 1] dissolves in [Molecule 2].

Functional groups:

|  |  |  |  |
| --- | --- | --- | --- |
| Functional group: | General formula: | Suffix: | Intermolecular forces present: |
| Alcohol |  | –ol | * Hydrogen bonding
* Dipole-dipole forces
* Dispersion forces
 |
| Aldehyde |  | –al | * Dipole-dipole forces
* Dispersion forces
 |
| Ketone |  | –one | * Dipole-dipole forces
* Dispersion forces
 |
| Amine |  | –amine | * Hydrogen bonding
* Dipole-dipole forces
* Dispersion forces
 |
| Amide |  | –amide | * Hydrogen bonding
* Dipole-dipole forces
* Dispersion forces
 |
| Carboxylic acid |  | –oic | * Hydrogen bonding
* Dipole-dipole forces
* Dispersion forces
 |
| Ester |  | –(alkyl group attached to single bonded oxygen)–… –oate | * Dipole-dipole forces
* Dispersion forces
 |

Priority:

1. Carboxylic acid
2. Ester
3. Amide
4. Aldehyde
5. Ketone
6. Alcohol
7. Amine
8. Alkyl groups + halogens

Can’t Eat An Ant, Keto Life is My Life

