

9/24 Properties of H₂O

1.) Cohesion - ~~like~~ ^{same} substance stick together
ex: H₂O to H₂O

2.) Adhesion - different substance stick together
ex: H₂O glass
plastic
paper

3.) Surface Tension - measure of how difficult it is to break the surface of a substance
due to Adhesion & Cohesion

4.) Density = $\frac{\text{mass}}{\text{Volume}} = \frac{5g}{5g/mL}$ Liquid H₂O $\frac{1g}{mL}$

5g / 5g/mL = 1g/mL

0.917g/mL Solid Ice

0.785g/mL Solid Steel

0.785g/mL Liquid Steel

8 | 5.0
48

5.) Solvent - substance that does the dissolving in a solution
solute - substance being dissolved in a solution

Salt Koolaid flour
Sugar Tea
Lemonade Medicine

→ Ionic Bond ✓
→ Covalently Bond polar ✓
Covalently

~~Covalently Bonded non polar~~

6.) Specific Heat - amount of energy required to raise 1 gram of a substance 1°C

Iron ³

1g H₂O = 1cal to change temp 1°C
32°C to 33°C 4°C → 28°C

1g Alcohol = 0.7cal to change temp 1°C
22°C to 33°C 10°C → 70°C