

Solutions

Solute + Solvent

Universal solvent  
↳ Water

MOLARITY M

$$M = \frac{\text{Moles Solute}}{\text{L Soln}}$$

Molality (m)

$$m = \frac{\text{Moles Solute}}{\text{Kg Solvent}}$$

Mar 10-8:29 AM

H<sub>2</sub>O dissolves

→ Polar

→ Ionic

Non-Polar ... Not so much ...

Na<sup>+</sup> ... POLAR

⊖ ... ⊕ ... ⊖

O

Mar 10-9:31 AM

Dilution

$M = \frac{\text{moles}}{\text{l soln}}$

← ↓ sugar.

← ↑ H<sub>2</sub>O

Moles START = Moles END

(Add H<sub>2</sub>O)

Mar 10-9:51 AM

have 6M HCl      need 100ml 2M HCl

how much dilute → Make.

Moles Start = Moles end

$M \times l = M \times l$

(6) ml = (2) (100) ml

Need ⇒ 33.3ml 6M HCl

$\frac{M}{l} = \frac{\text{moles}}{l}$

Volume =  $M \times l$

Mar 10-9:53 AM

P20

Soln  
Packet

Mar 10-10:02 AM