

$\Delta T = (K \cdot m) i$

↖ # ions.

Suspects

- ① NaCl
- ② CaCl₂
- ③ C₆H₁₂O₆
- ④ CuSO₄ · 5H₂O
- ⑤ BaCl₂

① Measure mass of solute + have ready

② 25g H₂O **BP**

③ ⊕ 2g BP

④ ⊕ 2g MORE (4g) BP

Mar 30-8:44 AM

Calculations

$K_b (H_2O) = 0.52 \text{ } ^\circ\text{C}/m$

(Subtract to find ΔT_b)

① Experimental ΔT

Normal BP $\xrightarrow{\Delta T}$ ^{BP} 2g $\xrightarrow{\Delta T}$ ^{BP} 4g

② Actual ΔT (calculated)

Mar 30-9:45 AM

ACTUAL NaCl

$$\Delta T = (K_f \cdot m) i$$

$$= (0.52 \cdot 1.38) 2$$

$\Delta T = 1.44^\circ C$

$$\frac{2g NaCl}{25ml H_2O}$$

$\Delta T = 2.87^\circ C$

$$(0.52 \cdot 2.76) 2$$

$\frac{4g NaCl}{25ml}$

Molality = $\frac{\text{moles NaCl}}{\text{kg H}_2\text{O}}$

$4g \rightarrow 2.76m$

$2g NaCl$	$1.38m NaCl$	$0.025 kg$
-----------	--------------	------------

$1.38m NaCl$

$25ml$
 $25g H_2O = 0.025 kg$

Mar 30-9:48 AM