Write your balanced equation: Chalk

Prelab Calculations: *show all work*!!!!

$Na_2CO_3 + CaCl_2 \rightarrow CaCO_3 + 2\,NaCl$ (table salt)

You will do the lab starting with 0.018 mol of $CaCl_2$ (A)

1) How many grams of $CaCl_2$ will you start with?
Pathway:

mol A → g A (molar mass A)

$0.018\ \text{mol A} \times \frac{\text{g A}}{1\ \text{mol A}} = \text{g } CaCl_2$

2) If you start with 0.018 mol of $CaCl_2$, how many moles of Na_2CO_3 do you need?
Pathway:

mol A → mol B (mole ratio)

$0.018\ \text{mol A} \times \frac{\text{mol B}}{\text{mol A}} = \text{mol } Na_2CO_3$

3) If you start with 0.018 mol of $CaCl_2$, how many grams of Na_2CO_3 do you need?
Pathway:

mol A → mol B → g B (mR, m.m B)

$0.018\ \text{mol A} \times \frac{\text{mol B}}{\text{mol A}} \times \frac{\text{g B}}{1\ \text{mol B}} = \text{g } Na_2CO_3$

4) If you start with 0.018 moles of $CaCl_2$ how many moles of $CaCO_3$ should you make?
Pathway:

5) If you start with 0.018 mol of $CaCl_2$, how many grams of $CaCO_3$ should you make?
Pathway:

6) If you start with 0.018 moles of $CaCl_2$ how many moles of NaCl should you make?
Pathway:

7) If you start with 0.018 moles of $CaCl_2$ how many grams of NaCl should you make?
Pathway:

8) Summarize your calculations in the table below. Use the solubility table in the classroom to fill in the last two rows of the chart.

DO THIS PART

	_____$CaCl_2$	_____Na_2CO_3 →	_____$CaCO_3$	_____NaCl
# moles	0.018 mol			
# grams				
Solubility				
Phase				

WAIT!

9) Rewrite your balanced equation including the phases.