

CONVERTING GRAMS - MOLES

* CONVERT 23.55 GRAMS OF CaCl_2 TO MOLES.

STRUCTURE: $23.55 \text{ grams } \text{CaCl}_2 \left(\frac{1 \text{ mol } \text{CaCl}_2}{64 \text{ grams } \text{CaCl}_2} \right) = 0.368 \text{ mol } \text{CaCl}_2$

23.55 = GRAMS GIVEN

64 = GRAMS IN ONE MOLE

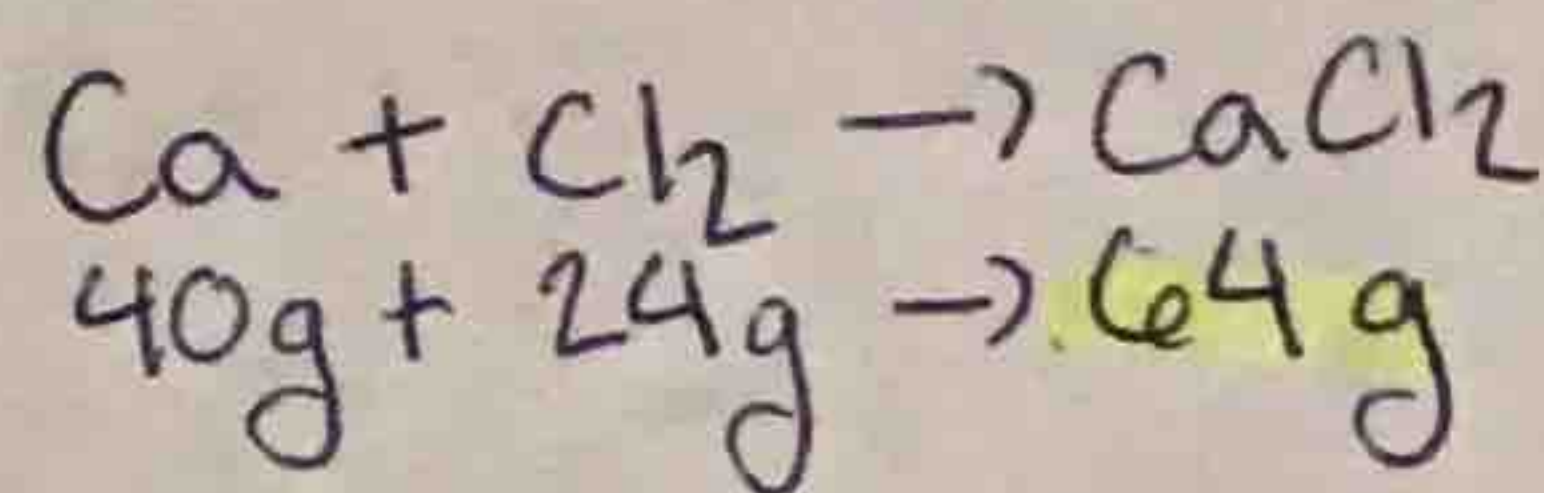
1 = 1 MOLE OF CaCl_2

0.368 = ANSWER!!

① FIGURE OUT HOW MANY GRAMS IS EQUAL TO 1 MOLE

$\text{Ca} \rightarrow 40 \text{ GRAMS}$

$\text{Cl}_2 \rightarrow 24 \text{ GRAMS}$



② SET UP EQUATION

$$23.55 \text{ grams } \text{CaCl}_2 \left(\frac{1 \text{ mol } \text{CaCl}_2}{64 \text{ grams } \text{CaCl}_2} \right)$$

③ DIVIDE: $1 \text{ mol } \text{CaCl}_2 \div 64 \text{ g } \text{CaCl}_2 = 0.0156$

↑
ROUNDED

④ MULTIPLY: $0.0156 \cdot 23.55 = 0.368$

↑
ROUNDED

answer

0.368 mol CaCl_2