

FIVE STAR. ★★★★★

How many formula units are in .642 moles of Na_2SO_4 ?

GIVEN

$$\frac{.642 \text{ mol } \text{Na}_2\text{SO}_4}{1 \text{ mol}} \times 6.02 \times 10^{23} \text{ fu.}$$

3.86×10^{23} f.u. Na_2SO_4

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How many moles are in 2.48×10^{21} atoms of Li?

GIVEN PARTICLES

$$\frac{2.48 \times 10^{21} \text{ atoms Li}}{6.02 \times 10^{23} \text{ atoms}} \times 1 \text{ mol}$$

$.00412$ mol Li
 4.12×10^{-3}

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How many atoms of potassium are in 3.2 moles of K_2S ?

GIVEN

$$\frac{3.2 \text{ mol } \text{K}_2\text{S}}{1 \text{ mol}} \times \frac{6.02 \times 10^{23} \text{ fu } \text{K}_2\text{S}}{1 \text{ fu } \text{K}_2\text{S}} \times \frac{2 \text{ atoms K}}{1 \text{ fu } \text{K}_2\text{S}}$$

3.9×10^{24} atoms K

$1 \text{ fu } \text{K}_2\text{S} = 2 \text{ atoms K}$

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How many atoms of O are in .999 moles of $\text{Mg}(\text{NO}_3)_2$?

GIVEN

$$\frac{.999 \text{ mol } \text{Mg}(\text{NO}_3)_2}{1 \text{ mol}} \times \frac{6.02 \times 10^{23} \text{ fu. } \text{Mg}(\text{NO}_3)_2}{1 \text{ fu. } \text{Mg}(\text{NO}_3)_2}$$

6 atoms O
 3.61×10^{24} atoms O

$1 \text{ fu } \text{Mg}(\text{NO}_3)_2 = 6 \text{ atoms O}$

