

Stoichiometry clicker questions

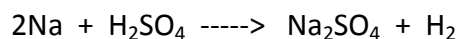
1. What is the mass of one mole of Oxygen (O)?

- a) 8 grams
- b) 10 grams
- c) 16 grams
- d) 32 grams

2. What is the mass of one mole of Oxygen gas(O₂)?

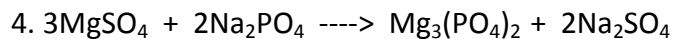
- a) 8 grams
- b) 10 grams
- c) 16 grams
- d) 32 grams

3. Use the following balanced equation to answer the question:



What is the mole ratio of Sodium (Na) to Sulfuric Acid (H₂SO₄)?

- a) 2 moles Na to 1 mole H₂SO₄
- b) 2 moles H₂SO₄ to 1 mole Na
- c) 1 mole Na to 1 mole H₂SO₄
- d) 2 moles Na to 2 moles H₂SO₄



What is the mole ratio of MgSO₄ to Na₂PO₄?

- a) 1:1
- b) 3 moles MgSO₄ to 2 moles Na₂PO₄
- c) 2 moles MgSO₄ to 3 moles Na₂PO₄
- d) 1 mole MgSO₄ to 2 moles Na₂PO₄

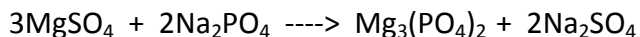
5. What is the mole ratio of MgSO₄ to Mg₃(PO₄)₂?

- a) 1:1
- b) 3 moles MgSO₄ to 2 moles Na₂PO₄
- c) 2 moles MgSO₄ to 3 moles Na₂PO₄
- d) 3 moles MgSO₄ to 1 moles Mg₃(PO₄)₂

6. How many moles of MgSO_4 would be needed in order to make 2 moles $\text{Mg}_3(\text{PO}_4)_2$?

- a) 12
- b) 9
- c) 6
- d) 3

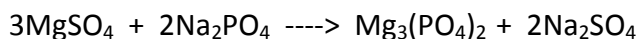
7. Use the following balanced equation to answer the question:



Which of the following is a proper interpretation of the chemical equation above?

- a) for every 3 moles of MgSO_4 2 moles of Na_2PO_4 are required
- b) for every 3 grams of MgSO_4 2 grams of Na_2PO_4 are required
- c) for every 3 grams of MgSO_4 2 moles of Na_2PO_4 are required
- d) for every 3 moles of MgSO_4 2 grams of Na_2PO_4 are required

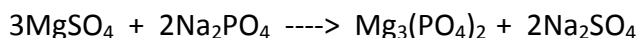
8. Use the following balanced equation to answer the question:



If I had 27 grams of Na_2PO_4 and I wanted to know how many moles of $\text{Mg}_3(\text{PO}_4)_2$ would be produced, what do I need to do before I can use the molar proportions in the chemical equation?

- a) find the molar mass of MgSO_4
- b) know how many moles of Na_2SO_4 I have
- c) find how many moles Na_2PO_4 27 grams of Na_2PO_4 is
- d) use 1 mole is equal to 6.02×10^{23}

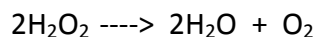
9. Use the following balanced equation to answer the question:



If I had 27 grams of Na_2PO_4 and I wanted to know how many moles of $\text{Mg}_3(\text{PO}_4)_2$ would be produced, and I have converted 27 grams into moles of Na_2PO_4 , what do I do next?

- a) find the molar mass of MgSO_4
- b) use to proportions from the equation for Na_2PO_4 and $\text{Mg}_3(\text{PO}_4)_2$
- c) use to proportions from the equation for Na_2PO_4 and MgSO_4
- d) use to proportions from the equation for Na_2PO_4 and Na_2SO_4

10. Use the following equation to answer the question:



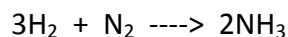
I have set up dimensional analysis to answer the following question: How many grams of H_2O_2 would be needed to produce 18 grams of O_2 ? Look at the following set up and identify where the setup is incorrect.

a	b	c	d
18 grams O_2	1 mole O_2	2 moles H_2O_2	34 grams H_2O_2
	16 grams O_2	1 mole O_2	1 mole H_2O_2

11. I have set up dimensional analysis to answer the following question: How many grams of H_2O_2 would be needed to produce 18 grams of O_2 ? Look at the following set up and identify where the setup is incorrect.

a	b	c	d
18 grams O_2	1 mole O_2	1 moles H_2O_2	34 grams H_2O_2
	32 grams O_2	2 mole O_2	1 mole H_2O_2

12. Which of the following is the proper set up for this question?



If I had 31 grams of H_2 how many grams of N_2 would I need?

A	31 grams H_2	3 mole H_2	1 mole N_2	28 grams N_2
		2 grams H_2	3 mole H_2	1 mole N_2

B	31 grams H_2	1 mole H_2	2 mole N_2	28 grams N_2
		2 grams H_2	3 mole H_2	1 mole N_2

C	31 grams H_2	1 mole H_2	3 mole H_2	28 grams N_2
		2 grams H_2	1 mole N_2	1 mole N_2

D	31 grams H_2	1 mole H_2	1 mole N_2	28 grams N_2
		2 grams H_2	3 mole H_2	1 mole N_2