

Assignment 6

Choose/Fill-in the correct answer.

1. Which property describes nonmetals?

- Low electronegativities
- High thermal and electrical conductivities
- They have high densities
- Have a tendency to form anions than cations

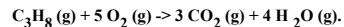
2. A solution of Al_2O_3 is 1.01 M. How many moles of O^{2-} ions are in 1.25 milliliters?

(Enter numeric answer here.)

3. What is the driving force of the following double-replacement reaction
zinc chloride + ammonium sulfide \rightarrow ?

- No driving force; no reaction occurs
- formation of a gas
- precipitate forms
- formation of an electrolyte

4. The balanced reaction for the combustion of propane, an important fuel used in cooking and water heating, is



How many grams of CO_2 will form if I have 4.00 moles of O_2 gas to burn?

- 2.4 grams CO_2
- 1.44×10^{24} grams CO_2
- 106 grams CO_2
- 132 grams CO_2

5. What is the driving force of the following double-replacement reaction
iron (III) chloride + sodium hydroxide \rightarrow ?

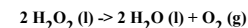
- No driving force; no reaction occurs
- formation of a gas
- precipitate forms
- formation of an electrolyte

6. When 22.5 grams of zinc and 22.5 grams of sulfur reacts, how much ZnS (s) is formed?
 $\text{Zn}(\text{s}) + \text{S}(\text{s}) \rightarrow \text{ZnS}(\text{s})$

- 22.5 grams ZnS is formed.
- 0.344 mole ZnS is formed.

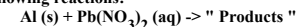
- 0.702 mole ZnS is formed.
- 68.4 grams ZnS is formed.

7. Classify the following chemical reaction



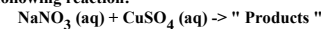
- synthesis
- single-replacement
- decomposition
- double-replacement

8. Predict the products of the following reactions:



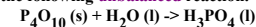
- There is no reaction
- $\text{AlNO}_3(\text{aq}) + \text{Pb}(\text{s})$
- $\text{Al}(\text{NO}_3)_2(\text{aq}) + \text{Pb}(\text{s})$
- $\text{Al}(\text{NO}_3)_3(\text{aq}) + \text{Pb}(\text{s})$

9. Predict the products of the following reaction:



- There is no reaction
- $\text{Na}_2\text{SO}_4(\text{s}) + \text{Cu}(\text{NO}_3)_2(\text{aq})$
- $\text{Na}(\text{SO}_4)_2(\text{aq}) + \text{Cu}(\text{NO}_3)_2(\text{aq})$
- $\text{NaSO}_4(\text{aq}) + \text{CuNO}_3(\text{aq})$

10. Write the balanced equation for the following unbalanced reaction.



- $\text{P}_4\text{O}_{10}(\text{s}) + 12\text{H}_2\text{O}(\text{l}) \rightarrow 4\text{H}_3\text{PO}_4(\text{l})$
- $2\text{P}_4\text{O}_{10}(\text{s}) + 6\text{H}_2\text{O}(\text{l}) \rightarrow 4\text{H}_3\text{PO}_4(\text{l})$
- $\text{P}_4\text{O}_{10}(\text{s}) + 6\text{H}_2\text{O}(\text{l}) \rightarrow 4\text{H}_3\text{PO}_4(\text{l})$
- $\text{P}_4\text{O}_{10}(\text{s}) + 14\text{H}_2\text{O}(\text{l}) \rightarrow 6\text{H}_3\text{PO}_4(\text{l})$

Send to obtain your score