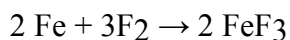


Chemistry Quiz

Name _____

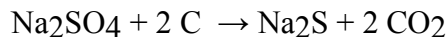
Please answer on an 882-E scantron. Please put your name on your scantron. Assume reactions are not balanced.

- In the reaction: $Cr_{(s)} + S_{8(s)} \Rightarrow Cr_2S_{3(s)}$, How many grams of Sulfur compound are needed to make 385 grams of $Cr_2S_{3(s)}$?
(A) 385.00g (C) 185.00 g
(B) 61.44 g (D) 144.38 g
- If 58.00 grams of $Cr_2S_{3(s)}$ in the above reaction was recovered, what would be the percent yield of the reaction ?
(A) 94.5%
(B) 37.5%
(C) 48.0%
(D) 15.0%
- How many grams of Chromium would be needed in the above reaction in Question #1 to make 385 grams of product?
(A) 100 grams
(B) 200 grams
(C) 300 grams
(D) 185 grams
- In the reaction of $Ca(OH)_{2(s)} + HNO_3 \Rightarrow ? + ?$, how many grams Nitric acid will be required to completely neutralize 100 grams of Calcium Hydroxide? (need to balance)
(A) 55.19g (C) 110.38g
(B) 220.77 g (D) 63.02g
- In the reaction: $Al + CuSO_4 \rightarrow Cu + Al_2(SO_4)_3$
What is the percent yield if you experimentally produce 3.65 grams of copper when 1.87 grams of Aluminum reacts with 9.65 grams of Copper (II) Sulfate?
(A) 51.23% (C) 37.8%
(B) 95.7% (D) 55.23%
- How many grams of fluorine are required to produce 20.0 grams of FeF_3 from the reaction shown?



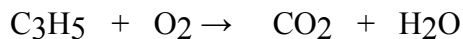
- A) 4.49 g B) 5.05 g C) 6.74 g
D) 10.1 g E) 20.2 g

7) How many grams of C will be consumed when 5.00 grams of Na₂SO₄ react according to the balanced reaction shown?



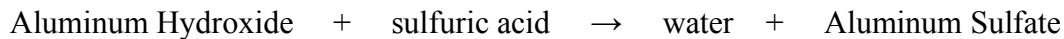
- A) 0.038 g
- B) 0.211 g
- C) 0.844 g
- D) 1.69 g
- E) 17.1 g

8) How many moles of CO₂ are produced when 2.5 moles of O₂ react according to the following equation? (balance)



- A) 1.5
- B) 3
- C) 5
- D) 6
- E) 18

9. If you have 0.05 moles of Aluminum Hydroxide, how many moles of Aluminum Sulfate can you produce, theoretically?



- (A) 0.05 moles
- (B) 0.10 moles
- (C) 0.15 moles
- (D) 0.20 moles

10. In the reaction: $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$

Calculate the theoretical yield of Calcium Oxide if 24.8 grams of Calcium Carbonate decomposes?

- (A) 10.9 g
- (B) 13.9 g
- (C) 16.9 g
- (D) 24.8 g