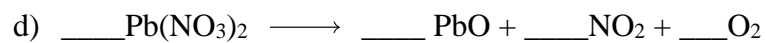
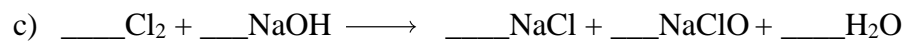
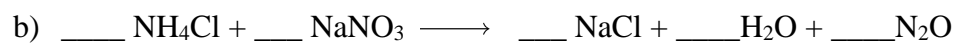
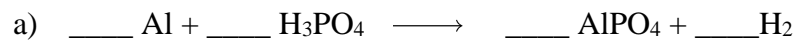
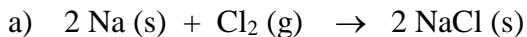


TEST 3 REVIEW

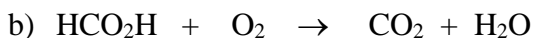
1. Balance each reaction below::



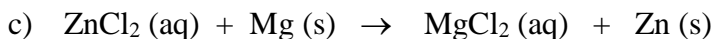
2. For each reaction below, determine the substance oxidized and the substance reduced:



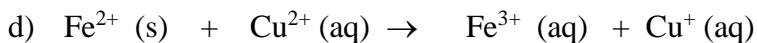
oxidized: _____ reduced: _____



oxidized: _____ reduced: _____



oxidized: _____ reduced: _____

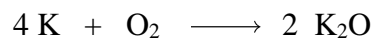


oxidized: _____ reduced: _____

3. For each half-reaction shown below (a) determine if it is written correctly, and (b) if correct, classify as oxidation or reduction:



4. Use the balanced equation shown below to answer the following questions:



- a) How many moles of O_2 are required to completely react with 0.56 moles of K?
- b) How many grams of K_2O can be formed from reaction of 0.65 moles of O_2 ?
- c) How many grams of K_2O can be formed from reaction of 5.00 g of K and 2.00 g of O_2 ?

5. Use the balanced equation shown below to answer the following questions:



- a) How many grams of CO_2 can be prepared from reaction of 0.575 mol of Fe_3O_4 ?
- b) In one experiment, 100.0 g of CO reacted with excess Fe_3O_4 to produce 141.3 g of Fe . What is the percent yield for this reaction?

6. Use the balanced equation shown below to answer the following questions:



- a) How many moles of carbon dioxide are produced from reaction of 35.0 g of C_5H_{12} ?
- b) How many grams of water are produced from reaction of 75.0 g of C_5H_{12} and 125 g of O_2 ?

Answers:

1. No answer provided.
2. a) oxidized: Na reduced: Cl
b) oxidized: HCO₂H reduced: O₂
c) oxidized: Mg reduced: Zn
d) oxidized: Fe²⁺ reduced: Cu²⁺
3. a) reduction
b) incorrect
c) oxidation
d) reduction
e) incorrect
4. a) 0.14 mol O₂
b) 120 g K₂O (2 sig figs)
c) 6.0 g of K₂O (2 sig figs)
5. a) 101 g CO₂ (3 sig figs)
b) 94.49% (4 sig figs)
6. a) 2.42 mol CO₂ (3 sig figs)
b) 52.8 g H₂O (3 sig figs)