

Introduction to General Chemistry CHM 1025C

Chapter Test-2, Ch 6, 7

NOTE: Failure to Follow Directions
 Failure put the Units in
 Failure to properly round

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13-Mar-2008 WEST, 1330, Room 2-213

Failure to show all equations
Failure to show all math work,
= *POINTS OFF*

PRINT YOUR NAME ON THE LINE: _____

(1 pt ea)

Your start time on this test _____

Your finish time on this test: _____

Time it took you to do this test: _____

A. FILL IN THE BLANKS – 2.5 POINTS EACH BLANK.

1. Ch 6-1 How do we know when a chemical reaction is taking place? Give an example of how each of the 5 senses might be used to detect when a chemical reaction has taken place:

1. Sight _____

2. Hearing _____

3. Taste _____

4. Touch _____

5. Smell _____

6. Ch 6-7 For the general chemical equation $A + B \rightarrow C + D$, define the following:

6. Reactants _____

7. Products _____

8. Ch 7-3. What do we mean by a precipitation reaction?

9. Ch 7-4. When two solutions of ionic substances are mixed and a precipitate forms, what is the net charge of the precipitate?

10. Ch 7-12. Based on the general solubility rules, predict which of the compounds below will NOT be soluble in water:

10. Lead (II) Sulfide _____

11. Iron (III) Hydroxide _____

12. Potassium Fluoride _____

13. Magnesium Sulfate _____

14. Iron (II) Sulfide _____

15. Potassium Carbonate _____

16. Calcium Carbonate _____

17. Ch 7-54. Identify each of the following unbalanced reactions as belonging to one or more of the following categories: **PRECIPITATION** **ACID-BASE** **REDOX**

17. $\text{H}_2\text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$ _____

18. $\text{H}_2\text{SO}_4 + \text{Zn} \rightarrow \text{ZnSO}_4 + \text{H}_2$ _____

19. $\text{H}_2\text{SO}_4 + \text{NaOH} \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$ _____

20. $\text{H}_2\text{SO}_4 + \text{Ba}(\text{OH})_2 \rightarrow \text{BaSO}_4 + \text{H}_2\text{O}$ _____

21. $\text{AgNO}_3 + \text{CuCl}_2 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{AgCl}$ _____

B. EQUATIONS 5 POINTS EACH

1. Ch 6-20. Many over-the-counter antacid tablets are now formulated using calcium carbonate as the active ingredient, which enables such tablets to also be used as dietary calcium supplements. As an antacid for gastric hyperacidity, calcium carbonate reacts by combining with hydrochloric acid producing the "BURP". Write the Unbalanced Equation

2. Ch 6-24. Hydrogen Sulfide gas is responsible for the odor of rotten eggs. It also burns in air, producing sulfur dioxide and water. Write the Unbalanced Equation for this burning:

3. Ch 6-40. Balance each of the following chemical reactions:





6. Ch 6-67. When a strip of Magnesium is heated in Oxygen, it burns with a white flame and produces a finely powdered dust of magnesium oxide. Write the Unbalanced Equation

7. Ch 7-18. Write the balanced molecular equation and underline any precipitate that forms. If no precipitate forms, so indicate it:

7. Sodium sulfide and copper (II) chloride

8. Potassium phosphate and aluminum chloride:

9. Ch 7 -26 Calcium nitrate and sulfuric acid

10. Ch 7-42. Give a complete example of a simple chemical reaction that involves the transfer of electrons from a metallic element to a nonmetallic element.

Summary:

| Section | # of Quest | Pts Ea | Tot Pts | # Right | Total Pts |
|------------------------------|-------------------|---------------|----------------|----------------|------------------|
| 1. Fill in the Blanks | 21 | 2.5 | 52.5 | | |
| 2. Balance Reactions | 10 | 5 | 50 | | |
| Total | | | | | |

How do you rate this test from 1 to 10 _____

1 = Very Easy, can do it with my eyes closed

10= Very Very Difficult, could not do any of the problems