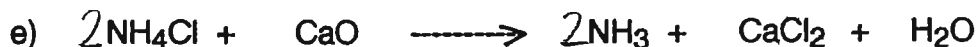
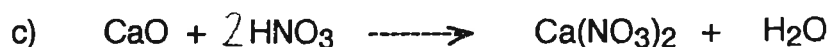
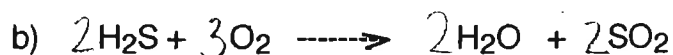


## CHEMICAL EQUATIONS TEST

Name \_\_\_\_\_

Key.

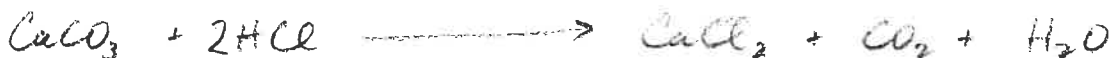
1. Balance the following chemical equations: ( 1 mark each)



2. Convert the following word equations into balanced chemical equations.

(3 marks each)

a) Calcium carbonate reacts with hydrochloric acid to produce calcium chloride, carbon dioxide and water.



b) Aluminum reacts with copper II nitrate to produce aluminum nitrate and copper.

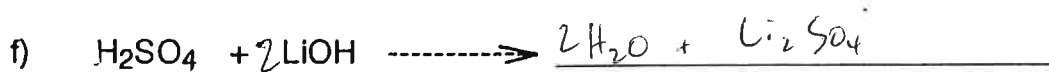


c) Ammonia gas ( $\text{NH}_3$ ) reacts with oxygen gas to produce nitrogen gas and water.

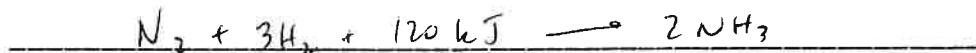


d) Calcium hydroxide reacts with hydrochloric acid to produce calcium chloride and water

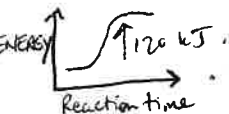




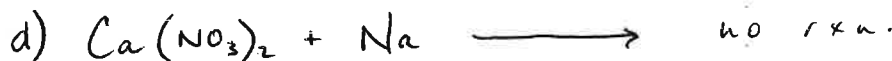
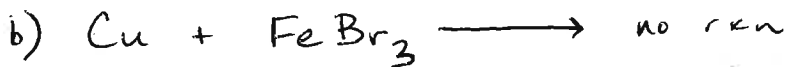
5. Rewrite the following equation using the energy term as part of the equation



6a) Is the reaction above exothermic or endothermic? endothermic

b) Draw the graph on next page: 

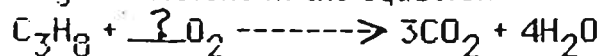
7. Predict the products of the following reactions (at room temp.). Balance the equation when required:



## CHEMICAL REACTIONS - GENERAL MULTIPLE CHOICE QUESTIONS

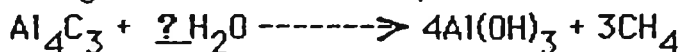
Answer Key

1. What is the missing coefficient in the equation



- A. 2
- B. 3
- C. 4
- D. 5

2. The missing coefficient in the equation below is



- A. 4
- B. 12
- C. 6
- D. 24

3. Numbers placed in front of formulas in an equations are called

- A. Coefficients
- B. Subscripts
- C. Products
- D. Reactants

4. The symbol that indicates that a substance is dissolved in water is

- A. (l)
- B. (aq)
- C. (H<sub>2</sub>O)
- D. (w)

5. Which of the following statements is true?

- A. subscripts tell how many molecules are involved in a reaction
- B. coefficients are used only in reactions which go to completion
- C. subscripts tell how many atoms make up a molecule
- D. coefficients can be fractional in a balanced equation

6. Which of the following reactions would not occur? (at room temp.)

- A.  $\text{Na} + \text{FeS} \longrightarrow$
- B.  $\text{Cu} + \text{SnCl}_2 \longrightarrow$
- C.  $\text{Mg} + \text{AlCl}_3 \longrightarrow$
- D.  $\text{Br}_2 + \text{NaI} \longrightarrow$