

Name: \_\_\_\_\_

**SCH 3U Balancing Quiz**

Write balanced chemical equations for each:

- a) synthesis of calcium sulphite from calcium oxide and sulphur dioxide
  
- b) decomposition of ferric oxide
  
- c) pentane ( $C_5H_{12}$ ) is burned in oxygen to form carbon dioxide plus water vapour
  
- d) stannic chloride undergoes a single replacement reaction with aluminum metal
  
- e) barium hydroxide and phosphoric acid undergo a neutralization reaction
  
- f) cobalt(II) chloride hexahydrate ( $CoCl_2 \cdot 6H_2O$ ) undergoes thermal decomposition to form cobalt(II) chloride plus water
  
- g) Calcium chlorate decomposes to form calcium oxide plus two diatomic gases
  
- h) potassium periodate and lead(II) nitrate undergo a double replacement
  
- i) aluminum carbonate and potassium metal undergo a single replacement
  
- j) lithium sulphate and auric nitrate undergo a double replacement reaction

Bonus: (hint: use changes in oxidation state to facilitate balancing)

