

**YEAR 11 ATAR CHEMISTRY**

**Units 1 & 2 TASK 13**

**Practical Report 2 Quiz Questions (MARKS: 30)**

**EXPERIMENT 21: TYPES OF CHEMICAL REACTIONS**

1. Complete the general word equations (**on the answer sheet)** : (2 marks)

2. What wouldyou **observe** when each of the two reactions above are carried out?

(2 marks)

# Experiment 22: SolubilitY RULES

3. Fill in the table (**on the answer sheet)** with the colour of the precipitate or write “NR”

if there is no precipitate formed, when each combination of solutions is mixed together. (6 marks)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Solutions | NaNO3 | NaCl | Na2SO4 | Na2CO3 |
| A | AgNO3 |  |  |  |  |
| B | Pb(NO3)2 |  |  |  |  |
| C | BaCl2 |  |  |  |  |

4. Why is it important to wash out the plate or test tube with distilled water before carrying out another test in it? (2 marks)

**Experiments 31, 32 – ACID REACTIONS WITH SOME METAL COMPOUNDS**

1. Fill in the table (**on the answer sheet)** with the colour “blue” or “red”. (2 marks)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Substance added | Colour of red litmus | Colour of blue litmus |
| A | Hydrochloric acid |  |  |
| B | Sodium hydroxide |  |  |

1. **On the Answer Sheet**, complete and balance the following molecular equations for the reactions *if* they occur. If they don’t occur, write “no reaction”. (4 marks)
   1. HCl + Mg →
   2. HCl + Cu →
   3. HCl + CaCO3 →
   4. HCl + NaHCO3 →
2. a) Give two observations that you made during the part of the experiment that

involved adding sodium carbonate to hydrochloric acid. (1 mark)

b) During the part of the experiment that involved adding hydrochloric acid

to copper(II) oxide:

1. What observation did you make that allowed you to identify the product

of the reaction? (1 mark)

ii) Write a balanced ionic equation, (showing all states) for this reaction.

(1 mark)

8. Fill in the table (**on the answer sheet)** for each reaction type to show all of the products formed-use any of the words/formulas: *salt, H2O, CO2, NH3* or *H2.*

Also give the test or method of identifying the product(s)-use the words: *pop test, limewater test, odour,* or *colour change.* (8 marks)

|  |  |  |  |
| --- | --- | --- | --- |
|  | REACTION TYPE | PRODUCTS | TEST/METHOD |
| A | Acid + Reactive Metal |  |  |
| B | Strong Acid + Strong Base |  |  |
| C | Acid + Metal Hydrogencarbonate |  |  |
| D | Acid + Metal Oxide |  |  |

9. a) The reactivity of acids in aqueous solution relies on the action of which ion?

(½ mark)

b) Using the *Arrhenius* theory, write an equation showing how hydrochloric acid produces this ion. (½ mark)

END OF TEST