

Question 26**(10 marks)**

Solid copper(II) hydroxide is added to excess 0.100 mol L^{-1} carbonic acid solution.

- (a) Write the balanced equation, with appropriate state symbols, for the reaction that takes place between the copper(II) hydroxide and carbonic acid. (3 marks)

- (b) Predict **all** visible changes that would be observed, if any, while the reactants are mixed together and afterwards. (3 marks)

- (c) Predict **two** observations that would be different if excess 0.100 mol L^{-1} hydrochloric acid was used instead of the 0.100 mol L^{-1} carbonic acid. (2 marks)

One: _____

Two: _____

- (d) State **two** personal safety measures the experimenter should take when conducting these experiments. (2 marks)

One: _____

Two: _____