

Read the 1st chapter and answer all the given questions.

Q1) You will need to convert words into formulae and decide which ones are reactants and which ones are products.

a) When 11.2 g of iron reacted with excess chlorine, 32.0 g of iron (III) chloride were formed. What is the equation for the reaction?

b) What volume of oxygen at standard temperature and pressure is needed to burn exactly 6 dm³ methane according to the following equation?



Q2) Acid reactions are important. In each of these reactions, a salt is formed. The reactions can be used to prepare samples of salts.

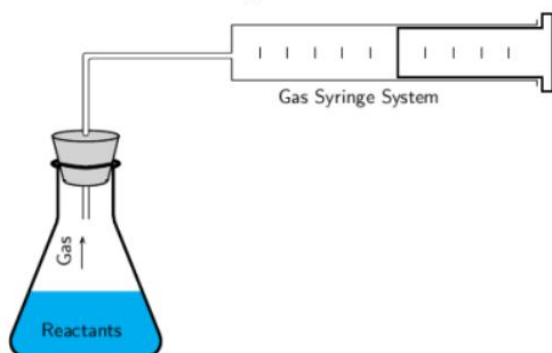
a) Write all the reactions of acids.

b) Determine if all the reactions are exothermic or endothermic with explanation.

Q3) What is the difference between displacement and precipitation reaction ? Explain it.

Q4)

A reaction between lithium and water at 25°C has been carried out in the lab and quantities of some of the reacting materials have been measured.



They reacted 0.035 g of lithium with water and 60 cm³ of hydrogen was collected in a gas syringe. Use this information to confirm the correct equation:

