**Topic 6 Exercise 4 – Uses of chlorine and chlorate (I)**

1. a) Write an equation to show the reaction between chlorine and water to

make chloric (I) acid

1. State what is oxidized and what is reduced in this reaction
2. State an application of this reaction
3. a) State what happens when chlorine is added to water in the presence of bright

sunlight

1. State what is oxidized and what is reduced in this reaction
2. Explain why chlorine is added to the water supply
3. State one advantage and one disadvantage of adding chemicals to the water supply
4. a) Write an equation to show the reaction between chlorine and sodium

hydroxide to make sodium chlorate (I)

1. State what is oxidized and what is reduced in this reaction
2. State an application of this reaction