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**MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING & EARLY CHILDHOOD EDUCATION**

**CHAMA BOARDING SECONDARY SCHOOL VERSUS CHAMA DAY SECONDARY SCHOOL**

**MUCHINGA PROVINCE**

**SENIOR CHEMISTRY JETS QUIZ**

**DATE GIVEN: Thursday, 20 March 2014**

**TIME ALLOCATION: 30 sec / Question Unless Specified In the Respective Question**

1. One attempt only: An atom has 1 electron in its outer orbit, and it readily loses this electron to form an ion X+. To which group of the Periodic Table does it belong?

**Answer: Group I (Alkali metals).**

1. Give the value of the volume of any gas at standard temperature and pressure.

**Answer: 22.4dm3**

1. One attempt only: Which one has the higher affinity for electrons, chlorine ion or sodium ion?

**Answer: Chlorine ion.**

1. Describe and explain what you would see when chlorine gas is bubbled through aqueous potassium iodide.

**Answer: Chlorine would displace iodine to form potassium chloride because chlorine is more reactive than iodine.**

1. What is the test for chlorine?

**Answer: Chlorine turns damp blue litmus paper red and then white (decolourise it).**

1. One attempt only: Diamond is the hardest substance ever known on earth and it is used in cutting and drilling glass and rocks. Is diamond a metal or a non-metal?

**Answer: It is a non-metal.**

1. Give the units of Avogrado's constant.

**Answer: per unit mole (mol-1).**