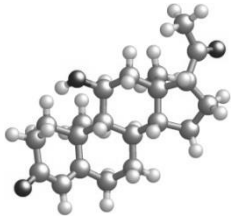
SCHOOL OF SCIENCE AND TECHNOLOGY, SINGAPORE



Chem!stry

Name: _____ **( )**

Class: _____

Date: ____ **/** ____ **/** ____

1. Find someone who can name the first six straight chain alkanes.	**2.** Find someone who can explain the different ways of measuring the speed of a chemical reaction.	**3.** Find someone who can explain the terms "oxidation" and "reduction" in three different ways.	**4.** Find someone who can describe how to measure the percentage oxygen in the Earth's atmosphere.	**5.** Find someone who can explain the properties of a catalyst and how it increases the speed of a chemical reaction.
6. Find someone who can explain how to electroplate an object with a layer of silver.	**7.** Find someone who can name the main atmospheric pollutants and explain why they are harmful to living organisms and the environment.	**8.** Find someone who can, in terms of chemical bonds, explain why exothermic reactions release energy.	**9.** Find someone who can explain the concept of "collision theory".	**10.** Find someone who can explain what happens during the electrolysis of concentrated aqueous potassium iodide.
11. Find someone who can summarise the reactions of the alkanes, with examples.	**12.** Find someone who can recall the test for; **i)** an oxidising agent, **ii)** a reducing agent.	People Bingo! Secondary 4 Chemistry	**13.** Find someone who can name all the fractions in the fractional distillation of crude oil.	**14.** Find someone who can sketch and fully label the energy profile diagram for an *endothermic* reaction.
15. Find someone who can explain the "*carbon cycle*".	**16.** Find someone who can explain why an increase in temperature increases the speed of a chemical reaction.	**17.** Find someone who can explain how a strip of copper and a strip of zinc can be used to generate electricity.	**18.** Find someone who can name the main atmospheric pollutants and explain how to reduce / minimise them.	**19.** Find someone who can, in terms of chemical bonds, explain why endothermic reactions absorb energy.
20. Find someone who can recall the reactivity series of metals, including carbon and hydrogen.	**21.** Find someone who can draw all of the isomers of $C_4H_{10}O$.	**22.** Find someone who can recall the rules for calculating oxidation states.	**23.** Find someone who can explain what happens during the electrolysis of aqueous copper(II) nitrate using copper electrodes.	**24.** Find someone who can summarise the reactions of the alkenes, with examples.