Chemistry Topic 8: Chemical analysis

1. Keywords	
Pure substance	A single element or compound not mixed with any other substance. They have a specific melting and boiling point
Melting point	The temperature at which a solid turns to a liquid
Boiling point	The temperature at which a liquid boils and turns into a gas.
Formulation	A mixture that has been designed as a useful product eg fuels, cleaning agents, medicines and fuels
Chromatography	Use to separate mixtures and identify substances
Rf	distance moved by substance distance moved by solvent

2. Identification of common gases			
Gas	Test	Observation	
Hydrogen	Burning splint	Squeaky pop	
Oxygen	Glowing splint	Relights	
Carbon dioxide	Limewater	Goes cloudy	
Chlorine	Damp Litmus paper	Bleached (goes white)	

impure substance Temperature (°C) pure substance

Time	(seconds)
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3. Graphs for Pure and Impure substances		
Substance	M.P and B.P Observation	
Pure	A specific value. A horizontal line on a graph (blue above).	
Impure	A range of values. A non-horizontal line on a graph (red above).	