

Chemistry: Key knowledge & skills	I heard about it	I get it	I can teach it
Explain what happens during a flame test in detail			
Explain why different chemicals produce different colours during flame tests			
Understand how and why cations and anions form and the resulting charge			
Explain how ionic compounds are formed			
Describe what happens in chemical reactions in terms of chemical bonds and the atoms involved throughout the reaction			
Identify reactants and products in chemical equations.			
Predict the products formed during double displacement reactions			
Explain what happens during a precipitation reaction			
Use appropriate chemical notation to provide written and formulae equations for chemical reactions			
Understand what the symbols, (s) (l) (g) & (aq) mean in chemical equations			
Use solubility charts effectively to predict if a precipitate will form and what it's chemical composition is			
Select appropriate reactants (aqueous solutions) to ensure that a precipitate will form during a reaction between them			
Distinguish between key terms; Solvent, Solute, Solution, Dissolve, Soluble, Insoluble, Precipitate, Aqueous, & Liquid			
Explain what pH is a measure of and calculate its value using: $pH = -\log[H^+]$			
Describe a variety of techniques for measuring pH			
Describe the relationship between pH and H^+ concentration			
Distinguish between acidic and basic/alkali chemicals based on their pH			
Explain the difference between the strength and concentration of an acid/base			
Understand the purpose of chromatography and how it works			
Interpret chromatograms and calculate retardation fraction			
Describe the involvement of the stationary and mobile phase in chromatography.			
Describe how temperature could influence the results of a chromatogram			
Explain how a chemical's polarity and solubility will affect their retardation fraction			

