

KS3 Unit Overview – Big Picture

Subject/Year group/Unit Title	Big picture questions	Pupils will focus particularly on the following statements from the programme of study:
<p style="text-align: center;">Chemistry Year 7C Chemical Substances</p> <p>Lesson 1: Mixtures and dissolving Lesson 2: Solubility and temperature Lesson 3: Separating rock salt Lesson 4: Chromatography Lesson 5: Simple and fractional distillation Lesson 6: Acids and alkalis Lesson 7: Making an indicator Lesson 8: pH scale and universal indicator Lesson 9: Neutralisation Lesson 10 + 11: Neutralisation investigation Lesson 12: Badger Assessment Lesson Lesson 13: EOU Assessment</p>	<p>How do we separate substances from each other? Can we explain how to distinguish between acids and alkalis? How do we neutralise and acid or an alkai?</p>	<p>CPu2: mixtures, including dissolving CPu4: simple techniques for separating mixtures: filtration, evaporation, distillation and chromatography CCh5: the pH scale for measuring acidity/alkalinity; and indicators CCh4: defining acids and alkalis in terms of neutralisation reactions CCh7: reactions of acids with alkalis to produce a salt, plus water</p>
<p>Assessment tasks</p> <ul style="list-style-type: none"> • Homework • Formative Badger Assessment • Summative end of unit test 	<p>As FCJ educators, we will focus on the FCJ values by: Companionship- Working in groups for practicals and discussion. Excellence - Achievement and progress in lessons.</p>	<p>We will ensure students skills in reading, writing, communication and mathematics are enhanced by: Marking for literacy in exercise books and using every possible opportunity to incorporate literacy.</p>
<p>We are supporting progression from KS2 in this unit by:</p>	<p>We are supporting progression to KS4 in this unit by:</p>	<p>Misconceptions and how they will be addressed</p>

<p>In KS2 pupils know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution, use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p>	<p>Substances can be separated from each other using various practical techniques. pH Scale is a measure of acidity and alkalinity. Acids react with alkalis to give salt and water.</p>	<p>All mixtures are separated using one separating technique, evaporation and boiling are the same thing, filtration can separate solutions, a solution is a single substance, acids can burn and eat away a material, neutralisation is an acid breaking down, an alkali inhibits the burning properties of an acid</p>
--	--	--