

Week 2: Solubility

Objectives & Resources	Lesson Notes
<p>Lesson 1 Solubility of substances</p> <p>Objectives To explain the meaning of solubility</p> <p>To use solubility curves to explain observations about solutions</p> <p>Resources <i>AQA Activate 1 - 5.2.3 Solubility</i> <i>Worksheet 5.2.3 Practical sheet</i> <i>Equipment - see notes to the teacher</i></p> <p>Extension There are extension questions on the worksheet</p>	<p>Starter What's the difference between a mixture and a solution? Can you think of any analogies to explain mixtures or solutions? Hint: for example, a salad can be used as an analogy for a mixture.</p> <p>Main Lesson</p> <ul style="list-style-type: none"> Write a description of what happens when sugar dissolves in water. Remember to describe what happens to sugar and water particles in your description. Read through pages 98 and 99 of your book and answer <i>Summary Question 1</i>. You are going to plan an experiment to find out how much salt is dissolved in seawater around the world. If you have lots of time, your teacher may allow you to do some of the experiment but the task today is really only about planning. Work through <i>Worksheet 5.2.3 Practical sheet</i>. Look at the graph on page 99 of your book. Can you give the solubility of: <ul style="list-style-type: none"> potassium nitrate at 40 °C potassium chloride at 0 °C cerium sulfate at 80 °C lead nitrate at 30 °C potassium chlorate at 50 °C sodium nitrate at 60 °C. <p>Plenary Copy and complete the following sentences: <i>The mass of _____ that that dissolves in 100 g of water to form a _____ solution is the solubility. Solubility is measured in _____ per 100 g of water. For most solutes, the solubility _____ when the temperature of the solvent increases.</i></p> <p>Homework Write a paragraph to explain why sugar can sometimes be found at the bottom of a teacup after the tea has been drunk. You may wish to include labelled diagrams in your explanation.</p>