

<b>Making water safe to drink - Lesson 2 of 2</b>		
Summary: A 'mystery' thinking skills activity to work out why water is so important, and understand the benefits of having access to clean safe water.		KS: 3 & 4
Additional opportunities:	In a future lesson, repeat the 'Why doesn't everyone have access to clean safe water' questionnaire and see whether responses have changed.	
Lesson Objectives:		
All students will...	Realise that water is essential for life and must be safe.	
Most students will...	Understand that it can be hard to provide safe water everywhere, but start to plan ways to improve the supply.	
Some students will...	Think about the importance of not wasting fresh water where they are.	
<b>Activities:</b>		
Starter	<p>Have three (clear plastic or glass) containers of water on the table: One with mud in and two 'clean'. Place stickers on the base (before filling!) with 'mud' 'clean' and 'invisible virus' labelled. Then ask students which ones they would drink. Students to stand near the cup they think is safe.</p> <p>Whole class discussion over why they think it's safe. Then pour them out, look at the labels and reveal how many would have died from the choice they made.</p>	<p>Alternative ICT starter: 3 images of water on PPT under the question 'which would you drink?'. When clicked, the glass reveals the impact of having drunk that water... Either for use individually or whole-class on a smartboard.</p>
Main	<p>Mystery: Why is Lisha a happy girl now? Give out statements and photos. Students firstly read them carefully. Then classify them. (Differentiation; provide students with ready-made groups. E.g. 'to do with making water clear', 'to do with Lisha' and 'benefits of having clean water'). In groups, discuss the issue, then brainstorm their thoughts and finally write out their answer to the question, to link in as much information as possible. Students should also write a list of questions they would need to find out answers to in order to work out the solution.</p> <p>Then feedback solutions to the mystery as a class; discuss and agree on the reasons, drawing out the social and other benefits of fresh water.</p>	<p>Also available as a Word document activity so students can classify, link and write-up using ICT.</p> <p>Groups then present ideas to the class and engage in whole-class discussion about the impact of clean water.</p>
Plenary	<p>Ask the students to suggest what links Lisha's mystery with the picture on the last but one PPT slide, and discuss how clean water is provided in the UK through water treatment works (sedimentation gets the solids out, filtration purifies the taste, chlorination kills germs – good diagram in: <a href="http://www.anglianwater.co.uk/_assets/media/Fact_File_3_-_Drinking_water_treatment.pdf">http://www.anglianwater.co.uk/_assets/media/Fact_File_3_-_Drinking_water_treatment.pdf</a>), and the benefits of water conservation in the UK (use less energy for processing, preserve water resources in dry weather)</p>	

	Show the Did You Know slide and call out or get together in groups to generate ideas for reducing water use in the home, or consult your water board for resources on water conservation to share with students. (E.g. <a href="http://www.south-staffs-water.co.uk/downloads/WaterUseHome.pdf">http://www.south-staffs-water.co.uk/downloads/WaterUseHome.pdf</a> )
Homework:	<ul style="list-style-type: none"><li>- Research and apply some water conservation ideas and then re-do your water use diary (on the same day of the week!) to see if you have been able to reduce the total, but don't forget to drink!</li> <li>- Imagine you did not have access to fresh, clean water. List 10 ways your life would change.</li></ul>