

<p>Topic: Animals including humans</p>	<p>Year 4 Age 8-9</p>	<p>Title: Teeth (eggs) in liquids</p>
<p>Working Scientifically Review: Use results to draw simple conclusions, suggest improvements and raise further questions.</p>		<p>Conceptual Knowledge Function of teeth – to find out about what damages teeth and how to look after them.</p>
<p>Assessment Focus</p> <ul style="list-style-type: none"> • Can children use results to draw conclusions? • Can children suggest explanations for their findings? 		
<p>Activity <i>Today we are dental scientists.</i> Discuss how children look after their teeth. Could use video http://www.youtube.com/watch?v=-nBSQQHYdkE Explain that we will be using hard boiled eggs to investigate tooth decay. As a class set up a fair test to investigate the affects that different liquids have on teeth e.g. cola, water, vinegar, milk, sports drink and orange juice. Discuss how they can make the comparison fair, i.e. as to quantity of liquid, types of containers, time and location (if using milk do they all need to be in the fridge?) Leave for one week, although children can check on the experiment daily to see if they can notice and changes. After one week, unveil the eggs by tipping into a white bowl and photograph. Children to record their observations (look, feel, smell, etc.) and rate the eggs in order of damage to shell observed. Children to consider how they could improve the test and what further questions arise that they would like answered. Children to suggest ways to answer their additional questions.</p> <p>Adapting the activity Support: Focus on comparing just two liquids. Ask questions to prompt suggesting reasons for findings. Extension: Could link with persuasive writing/advertising. Children could predict what would happen if the eggs were placed in hot drinks – tea (with increasing levels of sugar) or hot chocolate.</p> <p>Key Questions</p> <ul style="list-style-type: none"> • What do you think will happen? Why? • Why have some ‘decayed’ more than others? • What do you think is in the liquid that is making this happen? • Were there any surprises? • How is this this similar to your teeth? How is this different? • What would happen if the eggs were cleaned daily with toothpaste? • How would a diet drink compare with a regular drink? 		
<p>Assessment Indicators</p> <p>Not yet met: Describes differences, e.g. <i>the egg is OK in milk/water but not in coke.</i></p> <p>Meeting: Can order liquids according to damage done to eggs and suggest reasons why. Able to raise further questions, e.g. <i>I thought sports drink/orange juice was a ‘healthy’ drink but it was not, I wonder whether these drinks contain a lot of sugar?</i></p> <p>Exceeding: Would be able to think about other liquids or factors including acid and carbonated drinks and suggest causal relationships, e.g. <i>the more acid/sugar in the drink, the worse the damage.</i> Can recognise problems with the test, e.g. <i>use of eggs not teeth, eggs were in liquid for 1 week but I do not keep coke in my mouth for 1 week!</i></p>		

