

<p>Topic: Materials: States of matter</p>	<p>Year 4 Age 8-9</p>	<p>Title: Drying materials</p>
<p>Working Scientifically Focus Plan: Set up a fair test</p>		<p>Conceptual Knowledge Context Rate of evaporation</p>
<p>Assessment Focus</p> <ul style="list-style-type: none"> • Can children identify what is to be changed and what is to be kept the same? • Can children identify what to observe/measure to see if there is a difference? 		
<p>Activity</p> <p>Plan an investigation to reach a conclusion within a real life context, e.g. Where is the best place to dry your washing?</p> <p>Ask children, which conditions are the best to dry materials by evaporation?</p> <p>Make a list (warm, dry, windy). Discuss different places to investigate.</p> <p>In mixed groups, children to decide on the type of material (cloth/paper towels), quantity of water, locations to test evaporation (e.g. could arrange washing lines in different locations around the school) and how often to observe/check. Provide measuring equipment including thermometers, jugs, rulers.</p> <p>N.B. Paper towels can dry in an afternoon, heavy fabric will take longer.</p> <p>Adapting the activity</p> <p>Support: Questioning to support setting up fair test.</p> <p>Extension: Ask further investigation questions e.g. what is temperature / humidity of your locations?</p> <p>Other ideas: Data logger could be used to measure temperature of room over a 24 period and children could discuss which would be optimum time to dry washing.</p> <p>Key Questions</p> <ul style="list-style-type: none"> • What factors do you think will affect evaporation (drying)? • What will you do? • What will you change? • What will you keep the same? Why? • What are you measuring? • How will you record you observations? <div data-bbox="683 1391 1422 1536" style="text-align: center;"> <p>How will you do this?</p> </div>		
<p>Assessment Indicators</p> <p>Not yet met: Can make suggestions about how to answer the question but needs support to explain which variables must be kept the same.</p> <p>Meeting: Can carry out a fair test and is able to say what is changed and that other factors which could affect evaporations are kept the same, e.g. <i>I will keep the same...amount of water, size of material.</i></p> <p>Exceeding: Recognises additional variables and could suggest some controls, e.g. <i>have a dry towel outside to check it doesn't rain, put under gazebo so if it rains it doesn't get more wet.</i></p>		