

## BEN Expedition Session and Literacy Plan

Expedition: Evaporation and Condensation Lab	Date: December 3,4,5	Science
Time: 2 hour expedition		SEL Focus: Self Control (Lab Safety)
<p>MOED Strands:</p> <p><b>LO1:</b> Students will identify the various forms of precipitation.  <b>LO2:</b> Students will understand the importance of condensation and evaporation.  <b>LO3:</b> Describe and understand the key aspects of the Water Cycle.</p>		
<p><b><u>Materials needed:</u></b></p> <ol style="list-style-type: none"> <li>1. Hot plate</li> <li>2. Gloves</li> <li>3. Ice</li> <li>4. Salt/ sand/oil*</li> <li>5. Plastic cup</li> <li>6. Beakers</li> <li>7. Index cards- water question. (Smart Start)</li> <li>8. Pencils</li> <li>9. Thermometer</li> <li>10. Saran Wrap</li> </ol>		
Overview:	<ol style="list-style-type: none"> <li>1. 6 tables/ 7 hotplates/ groups of 2-4 (according to group size)</li> <li>2. BEN - Solutions and Mixtures Mini-lesson</li> <li>3. BAMZ- Evaporation&amp; Condensation Lab</li> </ol> <p><b>Vocabulary:</b> soluble, mixture, solution, dissolve, evaporation, condensation, crystals, precipitation, transpiration.</p>	

<p>Teaching Point/ Session Details:</p>	<p>1. Welcome/ Intro/ safety and</p> <p><b>BEN Hook (Solutions and Mixtures):</b></p> <p>Students sit on the rug. Fresh water and salt water are discussed. I mix the salt in the water and encourage them to use science terms. (soluble, insoluble, dissolve...)</p> <p>Stir in salt. Stir sand. Students are thinking like scientists. Making predictions.</p> <p>The solution is placed on a hotplate during land activities. Revisit the solution beaker at the end to see what has been left behind. What other types of solutions/ mixtures can you think of?</p> <p><b>Additional test-</b> Oil and water mixture.</p> <p>2. <b>BAMZ Lesson -</b> Objective: observe the process of condensation.</p> <p>Making rain:</p> <ol style="list-style-type: none"> <li>1. Fill beaker with water</li> <li>2. Cling wrap on top</li> <li>3. Beaker on hot plate</li> <li>4. High heat.</li> </ol> <p>Students are walked through the process of setting up the experiment. Observation skills are important for this lead task.</p> <ul style="list-style-type: none"> <li>- Visit the freezer for ice.</li> <li>- Use the thermometer to read and write temperatures in Celsius.</li> </ul> <p>Transition: Students sit on the rug after tidying up. Salt crystals are shown. Discuss.</p> <p>3. <b>Closing - Water Cycle Cards</b></p> <ul style="list-style-type: none"> <li>- Discuss and hand out cards on the parts of the water cycle.</li> </ul>
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