

Perspiration

Topic or Concept

Perspiration cools the skin by evaporation

Objective

Student will be able to measure cooling effects of evaporation

<p style="text-align: center;">Materials</p> <p>Not Available from Region 20 Living Science Materials Center</p>	<p style="text-align: center;">Enrichment Activity</p>
<p>Sauce pan Hot plate Cloth strips Electric fan Tall glasses Thermometers</p>	<p>Problem How does perspiration or sweat help cool a person?</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Warm some water in a large pan until the water has a temperature of 104° F. 2. Fill two tall glasses with this water and get one strip of cloth wet with the water so that all will be at the same temperature. 3. Wrap one glass with several layers of dry cloth and the other with the wet cloth. 4. Place one thermometer in each glass and one just under the top layer of cloth wrapper around each glass. 5. Place the glasses on a large table. 6. Direct the breeze from a fan so it blows against the glasses 7. At one-minute intervals, observe and record the temperatures indicated by each of the four thermometers. <p>Questions</p> <ol style="list-style-type: none"> 1. Which, if any, of the thermometers showed a decreasing temperature? 2. Which, if any, decreased most rapidly? 3. Which glass would you say most nearly represents a warm body covered with sweat? 4. Do the results of this investigation show that a wet surface cools faster than a dry one?