



Question:	How much pressure is required to shrink a Styrofoam cup and at what depth?
Hypothesis:	
Test Your Hypothesis:	
<p>Materials/Procedures: (note key words/terms to investigate) Styrofoam cups, permanent/waterproof markers, nylon sack, and a Research Vessel with a CTD. Use markers to decorate the cups as desired. Stuff the cups with paper towels and place the cups in the nylon sack. Secure the sack to the CTD and lower the CTD to the desired depth. After submersion is complete, remove the Styrofoam cups and paper towels and allow the cups to dry.</p>	
<p>Styrofoam Cup Data: (Density = mass/volume) Pre-Submersion Cube size: 75mm³; Post-Submersion Cube size: 30mm³</p> <p>Pre-submersion Mass: _____ Pre-submersion Volume: _____</p> <p>Pre-submersion Density: _____</p> <p>Post-submersion Mass: _____ Post-submersion Volume: _____</p> <p>Post-submersion Density: _____</p> <p>Maximum Depth Reached During Submersion: _____</p>	
<p>Analyze Your Results: (use graphs or illustrations as needed) (10 meters in depth = 14.5psi) How much pressure was achieved at the Maximum Depth Reached During Submersion? _____</p>	
<p>Draw Your Conclusion: Determine the percentage of shrinkage that the cups incurred based on the cube measurements provided below:</p> <p>Percent of shrinkage occurring during submersion at _____ feet = _____</p> <p>Would the Pre-submersion cup sink or float? _____</p> <p>Would the Post-submersion cup sink or float? _____</p>	