

## AP Physics 2 - Models for Fluid Statics and Fluid Dynamics - Standards Set 1

1.1 <b>FSM</b> I can draw a quantitatively accurate force diagram for an object experiencing a buoyant force.			
1.2 <b>FSM</b> I can use density to solve fluid static problems, as well as explain changes in buoyant force and water level when objects interacting with fluids change position. <i>Includes:</i> <ul style="list-style-type: none"> <li><i>explanations invoking a microscopic model</i></li> </ul>			
1.3 <b>FSM</b> I can relate pressure, force, and area. I can describe pressure differences and justify the description. <i>Includes:</i> <ul style="list-style-type: none"> <li><i>explanations invoking a microscopic model</i></li> </ul>			
1.4 <b>FSM</b> I can calculate and explain the pressure due to depth and distinguish between gauge and absolute pressure. <i>Includes:</i> <ul style="list-style-type: none"> <li><i>Air pressure</i></li> <li><i>Water pressure</i></li> </ul>			
1.5 <b>FDM</b> I can use the principle of continuity to explain fluid flow situations and to calculate flow rates or areas in a fluid flow problem.			
1.6 <b>FDM</b> I can calculate the pressures, velocities, and depths in a fluid motion problem, as well as explain the energy relationships. <i>Includes</i> <ul style="list-style-type: none"> <li><i>Energy bar charts</i></li> </ul>			

Quiz Average Calculations:  $50 + 25\left[\frac{\text{total standards score}}{\text{\#standards}}\right]$

A perfect score, if there were five standards:  $\text{Quiz Average} = 50 + 25\left[\frac{10}{5}\right] = 100\%$