

“Nature is relentless and unchangeable, and it is indifferent as to whether its hidden reasons and actions are understandable to man or not.”

Galileo Galilei



IN THE SWING OF THINGS

August 2009

July 2009

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September 2009

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<p>Physics Question — Hydrostatic pressure is a function of all but which of the following? W) Temperature, X) Salinity, Y) Depth, Z) Current speed</p>						<p>1</p> <p>Friendship Day</p>
2	3	4	5	6	7	<p>8</p> <p>Ernest Q. Lawrence's Birthday</p>
9	10	11	12	13	14	<p>15</p> <p>Opening of the Panama Canal, 1914</p>
16	17	18	19	20	21	<p>22</p> <p>Ramadan (Depends on the sighting of the Moon in N. America)</p>
23	24	25	26	27	28	29
<p>30</p> <p>Sylvia Earle's Birthday</p>	31					

At the age of 22, Galileo wrote a small treatise in which he explained how to measure weight relative to an equal volume of water. The device that he designed made use of a lever mechanism. The weight was fixed to an arm, which was wrapped with a metallic wire. The displacement of the weight could be measured very accurately by counting how many wire loops it passed. Galileo actually built this hydrostatic balance many years later, in 1608.

Today, hydrostatic pressure is the equation used to describe the pressure in water if the object is not moving, relative to the mass, density, and depth of the water. For example, the deeper a scuba diver descends into the water, the greater the amount of water there is above him. The more gallons of water between him and the surface, the greater the pressure is on the scuba diver's body because the water above him has a weight. This pressure is hydrostatic pressure.

Credits: Photo of scuba divers courtesy of www.photos.com; photo of boy in swimming pool courtesy of www.indexopen.com