



“Measure what is measurable, and make measurable what is not so.”  
Galileo Galilei



**SUCCUMBING TO GRAVITY**

**November 2009**

October 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

December 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		

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>1</b> All Saints Day Dia de los Muertos (Day of the Dead) Daylight Savings Time Ends	<b>2</b> All Souls Day	<b>3</b> Election Day	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b> Marie Curie's Birthday
<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b> Veterans Day	<b>12</b> NSTA Area Conference Ft. Lauderdale, FL	<b>13</b> NSTA Area Conference	<b>14</b> NSTA Area Conference
<b>15</b> Harald Sverdrup's Birthday	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>
<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b> Thanksgiving Day	<b>27</b>	<b>28</b> Eid al Adha (Depends on the sighting of the Moon in N. America)
<b>29</b>	<b>30</b>	<b>Earth Science Question</b> — They rank 1st and 3rd in abundance among the elements forming the Earth's crust. Give the names of the two elements that combine in crystalline form as the mineral corundum, number 9 on the Mohs scale of hardness.				

Ar: Oxygen and Aluminum (either order)

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The gal, also known as the galileo, is a unit of acceleration due to gravity named in honor of Galileo Galilei, who proved that all objects on Earth experience the same gravitational acceleration. One galileo is an acceleration of 1 centimeter per second (cm/s<sup>2</sup>).

Today, geologists use this type of measurement to measure variations in the acceleration of gravity and form conclusions about the geologic structures underlying an area. These variations, due to mountains or masses of lesser density within the Earth's crust, are typically measured in milligals (mGal). An instrument known as a "gravimeter" measures the acceleration due to gravity using a mass suspended from a sensitive spring and an accurate measuring system to calculate the spring's extension as gravity increases or decreases.

Credits: Gravimeter photo courtesy of the National Oceanic and Atmospheric Administration (NOAA) Central Library Historical Imagery; gravity map of the Southern Ocean around the Antarctic continent courtesy of NOAA