



“In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual.”  
Galileo Galilei

**FATHER OF MODERN SCIENCE**

**January 2009**

December 2008

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			

February 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
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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>General Science Question</b> — Which of the following is NOT considered a classic "thought experiment?" W) Brownian ratchet, X) Maxwell's demon, Y) Kierkegaard's (KEER-ka-gardz) ship, Z) Schrödinger's cat  <small>(A-Z) Kierkegaard's ship (Solution: the experiment is called "Galileo's ship")</small>				1 New Year's Day	2	3
4 Sir Isaac Newton's Birthday	5	6 Three Kings Day (Dia de los Santos Reyes) Registration Deadline for February ACT	7	8	9	10
11	12	13	14	15	16	17 Benjamin Franklin's Birthday
18	19 Martin Luther King, Jr.'s Birthday (Observed)	20 Inauguration Day	21	22	23	24 SAT and Subject Tests Date
25	26 Chinese New Year	27	28	29 Daniel Bernoulli's Birthday	30	31

Galileo Galilei, the "Father of Modern Science," was born in Tuscany on February 15th, 1564. He made monumental contributions to the fields of astronomy, mathematics, physics, and technology.

Galileo produced Galileo's Paradox, which stated that there are as many perfect squares as there are whole numbers, even though most numbers are not perfect squares. Rather than focus on the Aristotelian school of thought on why objects moved, Galileo instead focused on how they moved. He believed in a more practical approach to science and quantifiable ways of measurement such as time, distance, and acceleration.

He used the scientific method in his study of falling bodies. He formed a hypothesis that speed attained by falling objects is directly proportional to time elapsed, not distance traversed. He then inferred that distance traversed by a falling object must be proportional to the square of time elapsed. He experimented by rolling balls down a steep plane to verify his hypothesis.

*Credits: The portrait of Galileo Galilei in crayon by Leoni courtesy of The Galileo project, Rice University, USA; Inclined plane used by Galileo to roll balls down in his study of motion courtesy of the Institute and Museum of the History of Science, Florence, Italy; Below: Drawing of the crescent moon attributed to Galileo in his work, "Sidereus Nuncius" (first printed in Venice in mid-March 1610) courtesy of the Institute and Museum of the History of Science, Florence, Italy*