

Famous Thinkers: Galilei and Ford

Crack the medium-level codes and explore their lives

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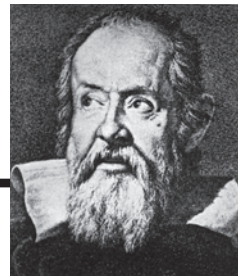
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$$E=mc^2$$

Galileo Galilei



Eureka!

Think of the numbers after each question as a set of directions to your answer. Crack the meaning of each number sequence to find another letter in your answer.

Called the “Father of Modern Science” by Albert Einstein, Galileo Galilei contributed more to the different areas of science than many other philosophers and scientists combined. He was a determined and curious man who took “I’ll believe it when I see it” to heart!

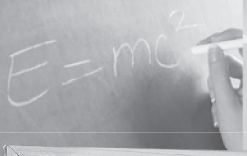
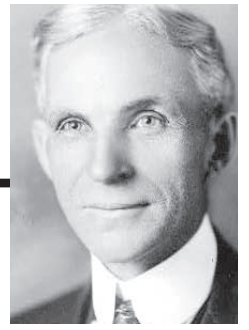
Galileo was born in Pisa, Italy, in 1564. His interest in the sciences began at a young age, as his father, Vincenzo Galilei, was a musician who was very interested in the connection between science and string instruments. It is thought that Vincenzo and Galileo worked together to learn about the relationship between physics and music, specifically string tension and pitch. Growing up, Galileo originally planned to become a priest but changed his mind (at his father’s urging) and applied for medical school in 1585. While at school, Galileo became very interested in mathematics, and eventually decided to make it his profession. He taught private lessons and gave lectures, and was soon appointed the chair of mathematics at the University of Pisa in 1589, and again at the University of Padua in 1592.

At this time, most science was based on the ideas of Aristotle, an ancient Greek philosopher. Aristotle taught that when a heavy object and light object were dropped at the same time, the heavier object would fall to the ground at a faster speed. Galileo disagreed with this theory, and performed many experiments to find the truth. One story tells of Galileo dropping balls of different weights from the top of the Leaning Tower of Pisa to see which would hit the ground first. While we do not know whether or not this story is true, we do know that Galileo’s experiments helped prove that the speed at which an object falls does not depend on its weight.

Questions:

1. What instrument did Galileo greatly improve?
2-6-2-1 _____
1-2-11-5 _____
2-3-14-3 _____
3-5-13-2 _____
5-4-25-1 _____
4-3-17-2 _____
4-3-1-7 _____
7-1-8-3 _____
6-1-5-6 _____
2. At what monastery did Galileo receive his early education?
1-2-11-6 _____
2-5-9-2 _____
2-6-7-1 _____
3-2-21-4 _____
4-1-1-7 _____
4-2-12-1 _____
6-1-1-1 _____
6-2-18-4 _____
6-4-17-7 _____
6-4-24-5 _____
7-3-21-1 _____
3. Galileo believed the Earth revolved around the sun. What other famous scientist had suggested this theory?
2-2-5-2 _____
2-2-25-2 _____
2-3-14-12 _____
2-3-19-3 _____
2-3-20-3 _____
2-4-5-4 _____
2-5-4-4 _____
2-6-13-1 _____
2-6-18-1 _____
2-6-27-7 _____
4. How many children did Galileo have?
1-2-4-3 _____
2-6-15-4 _____
3-2-1-2 _____
4-3-13-3 _____
7-3-16-6 _____
5. What was the title of Galileo's first book? (2 words)
7-3-7-5 _____
6-4-29-2 _____
6-1-4-4 _____
5-3-6-1 _____
5-2-3-5 _____
3-5-18-11 _____
3-2-27-2 _____
2-3-19-12 _____
2-1-1-6 _____
1-1-3-6 _____
6. In the last years of his life, from what health problem did Galileo suffer?
2-4-7-1 _____
3-1-12-8 _____
2-1-7-1 _____
7-1-3-3 _____
1-1-26-8 _____
3-4-16-4 _____
6-1-9-4 _____
5-4-5-5 _____
1-1-6-1 _____
7. What scientific concept caused Galileo to be put under house arrest?
1-1-3-4 _____
1-2-18-2 _____
2-4-22-6 _____
2-1-5-2 _____
2-6-28-1 _____
3-2-19-5 _____
3-5-23-4 _____
3-5-31-5 _____
4-3-17-9 _____
4-2-5-4 _____
5-2-9-4 _____
6-1-19-7 _____
7-3-10-4 _____
8. What instrument did Galileo's father play?
7-1-1-5 _____
3-2-2-3 _____
1-1-9-5 _____
6-4-26-10 _____

Henry Ford



Eureka!

Pay special attention to the specific shapes found above each letter. How are they different from each other? How is this difference related to the number before each question?

It is hard to imagine life without cars. Just over a hundred years ago, however, people were using horses and carriages for transportation. Automobiles had not even been invented yet!

Henry Ford, a forerunner in the automobile industry, was born in Dearborn, Michigan, on July 30, 1863. His father had immigrated from Ireland in 1847 and settled on a farm. When Henry was a child, he had to help his parents on the farm, but he disliked farming and discovered he was naturally good with machinery. He earned the reputation of a watch repairman because he was constantly disassembling and reassembling family and friends' timepieces. When he was 15, Henry went to Detroit to train to be a machinist.

In 1890, Henry put his knowledge of machinery to use and began experimenting with a "horseless carriage." He completed his first gas-powered vehicle (called a Ford Quadricycle) in 1896 and tried unsuccessfully to get it into production. In 1903, Henry started the Ford Motor Company.

In 1908, Henry and his company introduced the Ford Model T. This time, his car was a success! In 1913, Ford Motor Company began producing the Model T on a moving assembly line—a line made up of different work stations, each ready to assemble a specific part of the new car before passing it on to the next station. This moving assembly line made the manufacturing process much easier, and Ford was able to produce more cars with fewer workers. Henry's employees were paid higher wages than most workers at that time, earning five dollars a day. Since Ford Motor Company took good care of their employees and had developed an efficient way of producing vehicles, they dominated the automobile industry for the next fifteen years.