

How Newton Discovered Gravity



There are many stories about how Sir Isaac Newton discovered the Universal Law of Gravity in 1666, but here's how it is rumored to have happened.

Newton walked into his living room one afternoon, rubbing the top of his head. His scientist friends Sir Pratfall and Professor Epicfail were there, as usual, overindulging in Newton's food and bickering about planetary orbits.

Pratfall was the first to notice that something was unusual.

"Isaac!" he exclaimed, "I say, dear boy, you have a gigantic bump on your head!"

"He's probably been thinking too hard," smirked Epicfail.

"I'd prefer not to discuss it, if it's all the same to you," Newton replied.

"He's definitely been thinking too hard," Epicfail repeated to Pratfall, just to be obnoxious.

"Stop giving me a hard time," said Newton, becoming frustrated as he rubbed the bump. "An apple fell on my head, if you must know."

"That's terrible! I hope it didn't hurt," said Pratfall, attempting to sound sincere.

"No, it tickled, and I've never felt better," Newton snapped sarcastically, lowering his arm to his side. "Sometimes I wonder if you even think!"

"Well, I think you'd better start wearing a protective hat when you go out to the orchard," Epicfail replied.

Pratfall snickered and mumbled, "Good one."

"You two comedians can laugh and tease me all you want," Newton informed them, "When that apple hit my head, it really made me think."

"About staying in the house from now on," suggested Epicfail.

"It made him think about planting carrots and potatoes, of course," Pratfall chimed in.

Newton frowned, "No, my ridiculous friends. I started to wonder about gravity."

"There's nothing new to learn about gravity," said Epicfail, "That word's overrated. It's been around since the beginning of the 1500s."

"Yes, I am aware," Newton assured him, "But have you ever noticed how when things are falling, they... *accelerate*?" He pointed the bump on his head again, gently, to underscore his point.

Epicfail chuckled unkindly, "Actually, it's been scientifically proven that a great mind just steps out of the way when something's about to land on it."

Newton ignored the wisecrack and continued, "It seems to me that the longer something falls, the faster it goes, and my guess is that there's some Universal Law of Gravity, just waiting to be revealed."



"I think you need to go rest for a while," suggested Pratfall, pretending to be concerned.

"I wonder if there are any cheese and crackers left in the pantry," Epicfail suddenly declared, "My stomach's growling."

"I'm sure there's a large selection at the grocery store," Newton said, pointedly.

An awkward silence followed, and all three men glared at each other.

"Gravity just exists," Pratfall finally said, hoping to break the tension. "There's nothing to discover about it. Just watch where you're walking so you don't trip and fall, and keep looking up so you don't get any more lumps on your head."

"Apparently you're forgetting who the expert is around here," Newton said. "You always underestimate my cleverness, Pratfall. You are to science as connect-the-dot books are to Shakespeare."

"Well, that was a nasty thing to say," observed Pratfall.

"And anyway, you're one to talk," Epicfail shot back, "You are to theories as your rotten cooking is to an edible meal!"

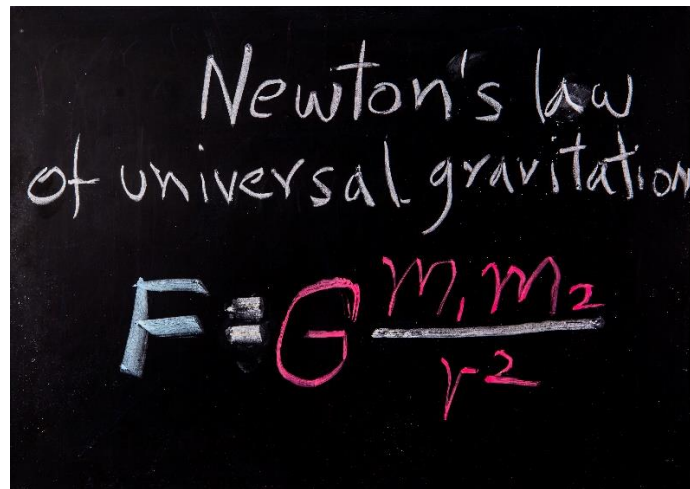
For a second time, Pratfall snickered and said, "Good one."

"Whatever," declared Newton, "I don't need either of you here right now; I've got a Universal Law I need to go figure out." He walked toward his study, "I'll be in here being one of the greatest minds of all time, so don't disturb me."

"Don't let a book about apples fall on your head," cautioned Epicfail.

"I think you freeloaders should accelerate yourselves out of my house," announced Newton, as he slammed the study door behind him.

Later that very afternoon, Newton made scientific history.



Newton's law
of universal gravitation

$$F = G \frac{m_1 m_2}{r^2}$$

The image shows a chalkboard with the text "Newton's law of universal gravitation" written in white chalk. Below the text, the formula $F = G \frac{m_1 m_2}{r^2}$ is written in red chalk. The 'F' and '=' are in white, while 'G', 'm1', 'm2', and 'r^2' are in red.