

“Idongetit” Tales

Kevin and Melbourne Learn About ... Gravity

Kevin and Melbourne sit in the library with their 8th grade science books out in front of them. Melbourne leans over his book, trying to answer the questions at the end of the chapter (without reading the chapter, of course) so that he can go home as soon as possible. Kevin’s eyes glaze over as he stares at the wall, not even pretending to read.

Who cares about acceleration and air resistance and friction, anyway?

Sunny walks into the room, “KEVIN! What are you doing?”

“Science.”

Sunny looked at the spot on the wall that Kevin had been staring at, “You don’t look like you’re doing science.”

“Idongetit,” Kevin mumbles... and suddenly the room starts to spin. The books and the chairs, and Sunny and Melbourne, everything turns in a giant swirl of colors. Then Kevin sees open sky and feels the wind rushing against his face: he’s moving upward. He’s sure of that. “Oh man...” he mutters. He did it again. The EdBoost Curse.... He’s been sucked into the vortex into “Idongetit” land. Kevin sighs, waiting to land and see what hits him next. And Melbourne too, who got sucked along for the ride.

When everything stops spinning, Kevin looks around. He sees Melbourne and a little old man. They seem to be on the top of a really, really tall building – or maybe it’s a mountain. It’s hard to tell because he’s so tiny, it feels like he’s a tiny speck of nothing.

“Oh, great,” Kevin says, “Not only did we get moved but we got shrunk!”

“Yeah!” says Melbourne, “And I was doing my work this time!”

“Whatever.”

“Uh...hmmm,” coughs the little old man.

Kevin and Melbourne look at each other, “Who’s this dude?”

“I am Galileo Galilei¹...”

Kevin and Melbourne giggle.

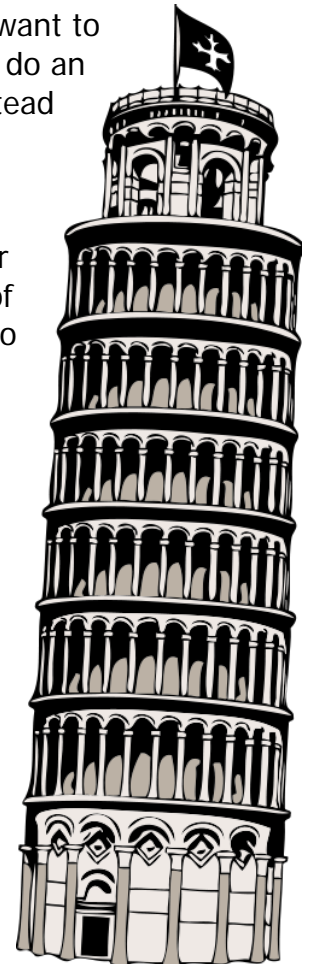
“I am Galileo Galilei,” the little man repeats himself louder this time, thinking that these two nitwits might be too silly to help him out anyway, “And I believe that you have been sent to help me out with some experiments.”

Kevin and Melbourne look at each other again, “O.... kay.....”

“Here’s the situation, Aristotle², that old crazy philosopher, HE thinks that a ten pound brick should fall faster than a one pound brick. I think he’s wrong. He insists that it’s only logical that something heavy will fall faster than something light. SO, I want to check it out. You know, do an actual experiment, instead of just THINKING about things, as those philosophers like to do. So....” Galileo pauses for dramatic effect, “Each of you is going to strap into one of these brick-cars and I AM going to drop you off the top of this tower.”

“We’re going to do WHAT? And you’re going to do WHAT?” Melbourne yelps.

“This tower,” he says, pointing over the ledge they stand on, “The Tower of Pisa.... Otherwise known as the Leaning Tower of Pisa³ given that it’s not quite straight.”



Kevin and Melbourne look down. It's a LONG drop to the ground. On... brick-cars?

"That's right, that's right" Galileo says, strapping tiny helmets on each of them. "Buckle in." And before they know what's going on, Kevin and Melbourne are sitting on top of bricks (which are much bigger than their tiny selves) and putting on tiny seatbelts. Kevin has the ten-pound brick and Melbourne has the one-pound brick.

Galileo calls his assistant, "One, two, three!"

And the next thing that Kevin and Melbourne know, they've been pushed right off the ledge of the Leaning Tower of Pisa, while sitting on bricks!

As they go off the ledge, Melbourne mutters, "Um... do bricks fly, by any chance?"

On the heavier brick, Kevin calls out, "See ya, Sucker!" He knows that the ten pound brick will definitely land before the one pound brick.

But shockingly, Melbourne keeps up. They fall neck-and-neck, all the way down. They fall at the exact SAME speed, all the way to the bottom.

BLAM! They land.

"Cool!" They shout as, luckily, they land in a bucket of pasta (they are in Italy, right?) that Galileo was smart enough to put at the bottom of the tower. They unbuckle and crawl out of the bucket, picking bits of spaghetti out of their hair.

"Whoo-hoo! I knew it! I knew it! I was right, I was right!" Kevin and Melbourne get out of the way because Galileo is jumping all over the place ("How did HE get down there?" the boys wonder). "I knew it! Everything falls at the same speed! Take that Aristotle! No matter what something weighs, it falls at the SAME speed! Whoo hoo! My theory of gravity is correct!" Galileo goes spinning around and

Kevin and Melbourne think that the vortex just might take them back home.

Review Questions:

1. How do Kevin and Melbourne end up in Galileo's time?
2. Based on what you have read, what is Galileo's job or profession?
 - a. Philosopher
 - b. Teacher
 - c. Scientist
 - d. Assistant
3. Why does Galileo choose two bricks that are different weights for the boys to ride?
4. Why is Galileo so excited at the end?
 - a. He proved his theory that everything falls at the same speed.
 - b. The boys did not get hurt in the experiment.
 - c. He is smarter than Aristotle.
 - d. He proved that bricks fall quickly.

5. What do you think the theory of gravity probably is?
- Bricks fall at the same speed.
 - The Leaning Tower of Pisa has a special gravitational field.
 - All objects fall at the same speed.
 - Heavier objects fall more quickly than smaller objects.

What do the following words mean *in the context of the passage*? (Words are underlined in the passage.)

6. Vortex
- A swirling mass of air or fluid
 - Shiny objects
 - A lot of science
 - A secret code word
7. Experiment
- A trick to get children to do adult work.
 - A science quiz.
 - A hands-on project.
 - A scientific way of testing a theory.
8. Philosopher
- Someone who studies history.
 - Someone who studies deep questions in all areas.
 - Someone who studies geology.
 - A scientist who performs experiments.
9. Logical
- Fictional, untrue.
 - Whimsical, fanciful.
 - Reasonable, rational.
 - Strong, unbreakable.

10. Dramatic
- Sad, mournful.
 - Creating suspense.
 - Waiting.
 - Playful, having fun.

¹ **Galileo Galilei** (1564-1642) has been called the father of modern astronomy and the father of modern science. Galileo died under house arrest for saying that the earth revolved around the sun (at a time when most people, and the Roman Catholic Church believed that the sun revolved around the earth). Galileo was right, but no one knew it then. A popular story says that Galileo dropped balls of different masses from the Leaning Tower of Pisa to show that objects of different masses drop at the same rate. However, there is no record that he actually performed the experiment; he probably just thought about it. However, now we know that if he had performed the experiment, he would have been proven right

² **Aristotle** (384 BC – 322 BC) was a Greek philosopher who thought and wrote extensively about physics and whose physics ideas were influential for centuries (even if many of the ideas were eventually proven wrong). As a philosopher, Aristotle was more into thinking and talking about ideas than trying to prove them scientifically.

³ The **Tower of Pisa** is the bell tower of the cathedral of the Italian city of Pisa. The tower leans to the side, thus the nickname, "The Leaning Tower of Pisa." Before it was restored in 1990, the tower leaned approximately 5 degrees; after restoration, it leans about 4 degrees. Because the tower is nearly 190 feet tall, even such a small lean, is quite visible. The top of the tower is about 12 feet over from where it would be if the tower were perfectly straight. Work on the tower began in 1173 and it began to lean before the second floor was even complete. However, despite the lean, the tower has stood for over 800 years and architects estimate that, after a recent restoration, it should be stable for at least another 200 years. Rumor has it that Galileo dropped cannonballs from the Tower of Pisa to test his theory of gravity, but because the story (which was told by Galileo's secretary) cannot be corroborated, it is considered to be a myth.