

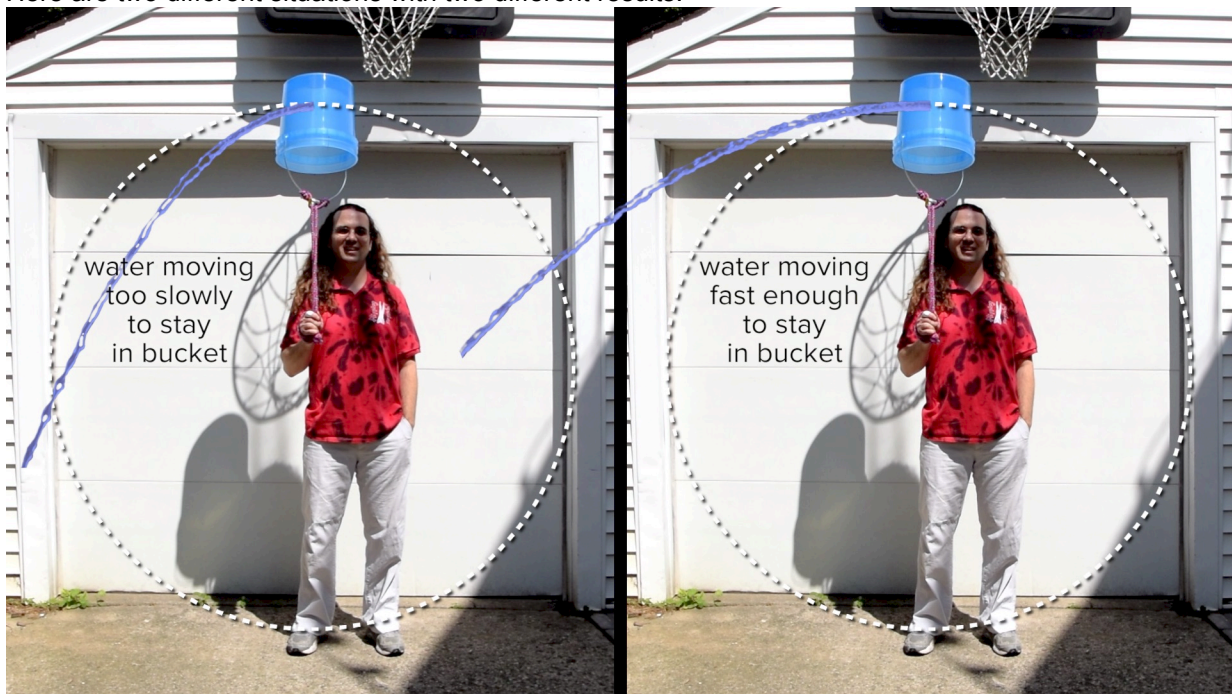
Flipping Physics Lecture Notes:

Demonstrating Why Water Stays in a Bucket Revolving in a Vertical Circle

Inertia is the tendency of an object to maintain its state of motion. Looking at the top position: The inertia of the water tries to keep the water moving to the left and the force of gravity pulls the water down.



Here are two different situations with two different results:



The inertia of the water, or the tendency of the water to maintain its state of motion, is what keeps water in the bucket. In other words, the water is moving and wants to keep moving in a straight line, however, the bucket keeps getting in the way, which is why water stays in the bucket.