

## Science in the Middle: Episode 46 -- Think Like a Rocket Scientist



Script	Files
Welcome to Science in the Middle -- science for middle school students who want to know it all.	SiMintro.wav
Today's episode of Science in the Middle is "Think Like a Rocket Scientist, Part 1." Hi, I'm Elena. NASA rocket scientist Tristan Curry and I are going to tell you how Newton's First Law of Motion applies to a rocket.	rcktsci1a
<i>Isaac Newton came up with three laws of motion. The first one is that an object will remain at rest unless acted on by an outside force.</i>	09a
Cool! The rest of Newton's First Law of Motion says that an object in motion will stay in motion at the same speed and direction unless acted upon by an unbalanced force. In other words, nothing wants to change. An object wants to keep doing what it's doing unless something changes it. For example ...	rcktsci1b
<i>An object such as a rocket will remain on the Earth until acted on by an outside force, such as the force from the engines that are going to push it off of the Earth.</i>	10a
Then, when the rocket is in space, it would continue in a straight line at the same speed unless gravity from a planet or moon, or the rocket's navigation system, changes it.	rcktsci1c
Newton's First Law of Motion is also called the Law of Inertia. Inertia is when an object wants to resist a change in motion. That's sort of how I am in the mornings. The law of inertia keeps me in bed, but my mom is the force that gets me to move. Hee hee. We'll, anyway, we're already thinking like rocket scientists.	rcktsci1d
On our next episode, we'll discuss rockets and Newton's <i>Second</i> Law of Motion.	rcktsci1e
Thanks for listening to Science in the Middle!	SiMoutro.mp3