

Doktor Kaboom!

Presented by
 Doceo
Arts

ARTS ENGAGEMENT TITLE
It's *Just* Rocket Science™

Suggested for
Grades 3-8

Total length
32 minutes



DESCRIPTION

Described as “part Mr. Wizard and part Mr. Rogers” Doktor Kaboom uses the excitement of rocketry to present Newton’s Laws of Motion in multiple, over-the-top, demonstrations. Each of Newton’s 3 laws is clearly explained, comically demonstrated, and followed by a DIY project that students can do as a class, in groups, or individually. 3 Laws, 3 lessons, 3 projects!

Throughout the Arts Engagement, Doktor Kaboom intersperses the lessons with discussions on safety and personal empowerment. Of particular focus here is using rocket science to prove that “science is for everyone, not just the person who wins the science fair every year”.

This is the perfect program for introducing or reviewing the physics of motion.

LEARNING CONNECTIONS

- ▀ **Science** (Sir Isaac Newton's 3 Laws of Motion; Inertia. Acceleration. Action / Reaction; Safe Science)
- ▀ **Math**
- ▀ **Theatre** (Actor's Tools, Costume and Set Design, Character, Improvisation)
- ▀ **Social-Emotional Learning** (Respect. Understanding. Cooperation. Making good choices)
- ▀ **21st Century skills** (Critical thinking. Creativity. Collaboration. Communication)

THINGS TO KNOW

- Videos can be used individually but students will benefit by viewing them sequentially.
- Activities can be differentiated to make challenge level appropriate to grade level.
- Supplies needed can be found in the Lab Reports following each Lesson Plan.
- This interactive video includes some "call and response" that may be loud for those with sensory sensitivities. Set expectations for acceptable noise level with students in advance.
- The results of some science experiences may happen quickly and surprise some students.

VIDEO 1 - INERTIA	Length: 15:28
Meet Doktor Kaboom and learn about Sir Isaac Newton's first Law of Motion: Inertia.	
VIDEO 2 - ACCELERATION	Length: 8:30
Doktor Kaboom thoroughly introduces Sir Isaac Newton's second Law of Motion: Acceleration.	
VIDEO 3 - ACTION / REACTION	Length: 8:05
Join Doktor Kaboom as he explains and demonstrates Sir Isaac Newton's third Law of Motion: Action / Reaction.	