

# Seventh Grade Physics: Mechanics

## Overview with Suggested Pacing & Activities

### Week One

- Day One:** Newton's First Law  
Casserole Dish, Nearly Empty Bottle of Ketchup, Egg Drop Inertia
- Day Two:** The Meaning of Force  
Light a Match, Gravity Water Drop, Magnets
- Day Three:** Types of Forces  
Stephen Hawking Gravity Videos, Solar System Book, Clothespin
- Day Four:** Newton's Second and Third Laws  
Rice and Chopstick, Letting Go of a Full Balloon

### Week Two

- Day Five:** Momentum  
Three Hole Bottle Inquiry, Newton's Cradle, Egg Toss
- Day Six:** Kinetic and Potential Energy  
Egg Drop Interactive Online, Rubber Band Snap Art, Galileo Biography
- Day Seven:** Egg Drop Activity
- Day Eight:** Pendulum Experiments

### Week Three

- Day Nine:** Lever
- Day Ten:** Pulley  
Block & Tackle, Assemble Cable Car Kit
- Day Eleven:** Wheel & Axle  
Balloon Car Team Challenge
- Day Twelve:** Inclined Plane, Wedge, and Screw  
Archimedes Biography, Build a Water Screw

### Week Four Activities:

- Biography of Zaha Hadid, Field Trip to a Design Studio, Take Apart a Bicycle,  
Build a Rube Goldberg Machine (OK Go video)