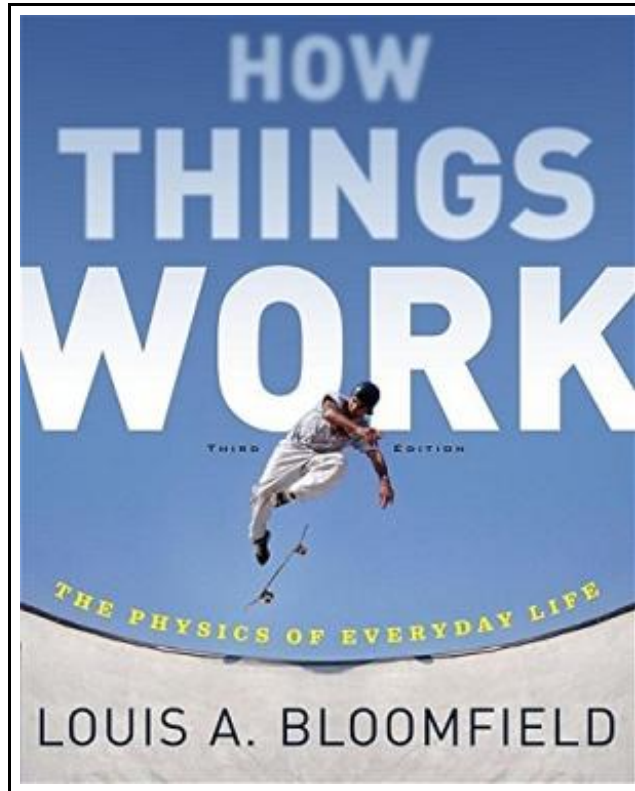


## How Things Work: The Physics of Everyday Life



Filesize: 7.22 MB

### ***Reviews***

*The most effective pdf i ever read. it absolutely was writtern extremely flawlessly and useful. I am very easily will get a pleasure of reading through a published book.*

*(Prof. Vidal Ledner)*

## HOW THINGS WORK: THE PHYSICS OF EVERYDAY LIFE



Wiley, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service!  
Summary: Chapter 1. The Laws of Motion, Part I. Experiment: Removing a Tablecloth from a Table 1.1.1 Skating. (inertia, force, velocity, acceleration, mass, Newton's first and second laws, inertial frames of reference, units).1.2 Falling Balls. (weight, projectile motion, vector components).1.3 Ramps. (net force, Newton's third law, energy, work, energy conservation, potential energy, ramps,mechanical advantage).Chapter 2. The Laws of Motion, Part II. Experiment: A Spinning Pie Dish.2.1 Seesaws. (rotational inertia, torque, angular velocity, angular acceleration, rotational mass, Newton's first and second laws of rotation, center of mass, levers).2.2 Wheels. (friction, thermal energy, wheels, bearings, kinetic energy).2.3 Bumper Cars. (momentum, impulse, momentum conservation, angular momentum, angular impulse, angular momentum conservation, Newton's third law of rotation, potential energy and acceleration).Chapter 3. Mechanical Objects, Part I. Experiment: Swinging Water Overhead.3.1 Spring Scales. (Equilibrium, stable equilibrium, Hooke's law, oscillation, calibration, center of gravity).3.2 Bouncing Balls. (collisions, energy transfers, vibration, elastic and inelastic collisions).3.3 Carousels and Roller Coasters. (feeling of acceleration, uniform circular motion, centripetal acceleration).Chapter 4. Mechanical Objects, Part II. Experiment: High Flying Balls.4.1 Bicycles. (unstable equilibrium, static and dynamic stability, precession).4.2 Rockets and Space Travel. (reaction forces, Newton's law of gravitation, elliptical orbits, Kepler's laws, special and general relativity, equivalence principle).Chapter 5. Fluids. Experiment: A Cartesian Diver.5.1 Balloons. (pressure, density, temperature, Archimedes' principle, buoyant force, ideal gas law).5.2 Water Distribution. (hydrostatics, Pascal's principle, hydraulics, hydrodynamics, steady state flow, Bernoulli's equation).Chapter 6. Fluids and Motion. Experiment: A Vortex Cannon.6.1 Garden Watering. (viscous forces, laminar and turbulent flows, speed and pressure in a fluid, Reynolds number, chaos, momentum in a fluid).6.2 Balls and Air. (aerodynamic lift and drag, viscous drag, pressure drag, boundary layers, Magnus and wake deflection forces).6.3 Airplanes. (streamlining, lifting wing, angle of attack, induced drag, stalled wing, thrust).Chapter...



[Read How Things Work: The Physics of Everyday Life Online](#)



[Download PDF How Things Work: The Physics of Everyday Life](#)

## You May Also Like

---



### **Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)**

HarperCollins, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Foreword by Raph Koster. Introduction. I. EXECUTIVE CONSIDERATIONS. 1. The Market. Do We Enter the Market? Basic Considerations. How...

[Read Document »](#)

---



### **Read Write Inc. Phonics: Blue Set 6 Storybook 6 the Jar of Oil**

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. Tim Archbold (illustrator). 148 x 148 mm. Language: N/A. Brand New Book. These engaging Storybooks provide structured practice for children learning to read the Read...

[Read Document »](#)

---



### **The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2, This is a gentle adaptation of the classic tale by Beatrix Potter. Jemima...

[Read Document »](#)

---



### **Eighth grade - reading The Three Musketeers - 15 minutes to read the original ladder-planned**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 124 Publisher: China Electric Power Press Pub. Date :2010-8-1. Contents: The first...

[Read Document »](#)

---



### **California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package**

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Read Document »](#)