



Physical Science: Force and Motion

Non-Fiction

Forces Make Things Move by Kimberly Bradley. Basic information about how things move.

Forces and Motion by Angela Royston. “No matter how high I throw a ball it will always come down to me and my pup.”

Give It a Push! Give It a Pull! by Jennifer Boothyard. A look at forces for grades 1 and 2.

I Fall Down by Vicki Cobb. Simple experiments introduce the concept of gravity and its relationship to weight.

Motion by Ellen Lawrence. Experiments using household objects.

Motion: Push, Pull, Fast, Slow by Darlene Stille. Explores the concepts of motion.

Move It by Adrienne Mason. Facts and hands-on activities appropriate of ages 4-7.

Roll, Slope and Slide by Michael Dahl. A book about ramps.

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Fiction

And Everyone Shouted “Pull” by Claire Llewellyn. A first look at force and motion.

Gigantic Turnip by Aleksei Tolstoy. A retelling of the folktale about a farmer whose turnip is impossible to pull from the ground. (Also: The Giant Carrot, The Enormous Potato, The Giant Cabbage)

Newton and Me by Lynne Mayer. A rhyming picture book that brings physics to preschool. Forces and motion in everyday life.

Oscar and the Cricket by Geoff Waring. Cricket helps Oscar roll, bounce and move objects in this engaging story illustrating force and motion concepts.

Roller Coaster by Marla Frazee. A delightful introduction to motion and forces.

Sheep in a Jeep by Nancy E. Shaw. This rhyming book is ideal for simplifying the topic of force and motion.

Inquiry Science

What is a Scientist? By Barbara Lehn. Simple text and photographs depict children engaged in various activities that make up the scientific process. Inquiry Science

Counting on Frank by Rod Clement. This is a story about a boy who likes to ask questions about the ordinary things around us.

How Big is a Foot? by Rolf Myller.

How Many Seeds in a Pumpkin? by Margaret McNamara.

Just a Little Bit. Ann Tompert. When an elephant and a mouse try to play on a seesaw, they need help from a vast number of animal friends to balance the scales.

Seven Blind Mice by Ed Young. Illustrates the importance of making careful observations and collecting evidence to develop explanations.

Up, Up in a Balloon by Lawrence Lowery. Fiction stories about exploring with science practices. Nine titles by this author.

What is Science? by Rebecca Kai Dotlich. Simple text and colorful illustrations introduce a wide range of science concepts. Good discussion starter.

Zoom by Istvan Banyai. Nothing is ever as it seems in this wordless book of pictures within pictures. Gives students a fun way to practice the scientific skills of observation, inquiry, and prediction.

Investigating Balls: Starting with a Story

The Secret History of Balls: The Stories Behind the Things We Love to Catch, Whack, Throw, Kick, Bounce by Josh Chetwynd. Trivia about balls. Fun to share with children and adults.

Ball by Mary Sullivan

Round Like a Ball by Lisa Ernst

Balls by Melanie Jones

Watch Me Throw the Ball by Mo Willems

The Great Fuzz Frenzy by Susan Crummel and Janet Stevens

Problem Solving: Fiction and non-fiction about inventiveness, perseverance and using inquiry skills and practices

The Day-Glo Brothers The True Story of Bob and Joe Switzer's Bright Ideas and Brand-New Colors by Chris Barton

Galimoto by Karen Lynn Williams. A young boy in Malawi is determined to make a galimoto (a push toy made of wire).

The Glorious Flight by Alice and Martin Provensen. A biography of the man who designed the first heavier-than-air machine to fly across the English Channel.

The Most Magnificent Thing by Ashley Spires. Shows how a new perspective can help in solving a problem.

Papa's Mechanical Fish. By Candace Fleming. Based on the real life of inventor Lodner Phillips. Highlights an inventor's perseverance, inspiration and cooperation with others.

POP! The Invention of Bubble Gum by Meghan McCarthy. A picture book biography of the history and invention of bubble gum.

Rosie Revere, Engineer by Andrea Beaty. Rosie is always trying to solve problems with her inventions. She learns that creativity requires deliberate thought and perseverance.

Professional Books

Exploring Science edited by Amy Shillady

Science Learning in the Early Years by Peggy Ashbrook (

Worms, Shadows and Whirlpools by Karen Worth

STEM Learning With Young Children: Inquiry Teaching With Ramps and Pathways by Shelly Counsell, et al.

“Young Thinkers in Motion: Problem Solving and Physics in Preschool” by Julia Stoll (NAEYC Young Children, March 2012, vol 67).