THE FRANKLIN INSTITUTE | THE SCIENCE OF SOCCER
ENGINEERED BY THE FRANKLIN INSTITUTE

ADDITIONAL RESOURCES

In this guide, you will find suggestions of books, digital resources like videos and online games, and additional activities that relate to each of the activities included in Science of Soccer.

Soccer, like many sports, is all about force and motion.

As players dribble, pass, block shots, and score goals, they're using the motion of their bodies to control the motion of the ball. And wherever you have moving objects, you have physics! The difference between tapping the perfect back-heel pass and driving home a penalty kick lies in understanding the forces at work on the ball: friction and momentum, angle and trajectory.

BOOKS

Forces: Physical Science for Kids by Andi Diehn (Author), Hui Li (Illustrator)

Goal: The Science Behind Soccer's Most Exciting Plays (Sports Illustrated Kids: Science Behind the Plays) by Eric Braun

Inspiring Soccer Stories for Kids: 14 Incredible Soccer Tales with Lessons in Courage & Mental Toughness for Young Sports Fans by Ben Byde

Motion: Push and Pull, Fast and Slow by Darlene R. Stille (Author), Sheree Boyd (Illustrator)

National Geographic Kids Everything Soccer: Score Tons of Photos, Facts, and Fun by Blake Hoena

The Big Book of Why: Amazing Sports and Science by the Editors of *TIME for Kids*

The Math of Soccer by Ian F. Mahaney

DIGITAL RESOURCES

Video: Curious Crew: Soccer Science (PBS)

Video: How Smoothness of a Soccer Ball Affects Curve (PBS)

Video: How the Magnus Force Curves Soccer and Baseballs (PBS)

Video: The Science Behind Soccer (STEMducate)

Video: Sports Medicine for US Women's Soccer (IF/THEN Collection)

Game: Soccer Hero (CBC)

ADDITIONAL ACTIVITIES

DIY Tabletop Soccer Game

Why Do Balls Bounce? Experiment

Popsicle Stick Catapult

Reaction Time Experiment

Science of Sports Activities