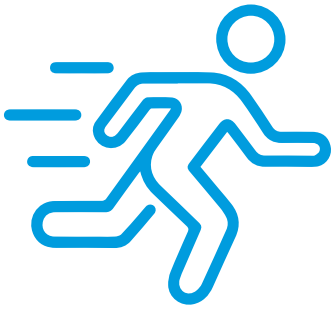
ENERGY IN MOTION



AGE RANGE

10–13

OVERVIEW

Noncommunicable diseases (NCDs) kill 41 million people every year, and physical inactivity increases the risk of developing these diseases.1 In this session, students will learn about kinetic energy and demonstrate the effects of mass and speed on energy during a lab activity. Students will draw conclusions about the connections between kinetic energy, physical activity, and reducing their risk of developing certain NCDs.

TIMING

45–60 minutes

OBJECTIVES

Students will

1. Understand how physical activity helps reduce the risk of developing certain NCDs
2. Understand that kinetic energy increases when the mass or speed of an object increases
3. Collect real world data during a lab activity to make inferences about kinetic energy based on calculations of average distance traveled
4. Make connections between the daily recommendation of physical activity and kinetic energy

MATERIALS NEEDED:

- Pencils, one per student
- Crayons or markers, one set per group
- Poster board, one per group
- Masking tape, three pieces per group
- Dry erase marker or chalk, one for the volunteer(s)
- Scissors