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

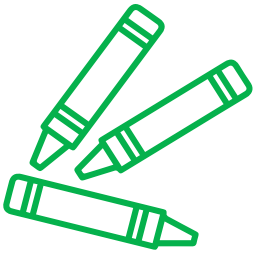
45–60 minutes

OBJECTIVES

Students will

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

MATERIALS NEEDED:



- Pencils, one per student
- Crayons or felt-tips, one set per group
- Poster board, one per group
- Masking tape, three pieces per group
- Whiteboard pens or chalk, one for the volunteer(s)