

INSCHOOL FIELDTRIPS.

LEARNING OUTCOMES:

3

GRADE THREE. **energy forces. gears and wheels.**

Our Grade 3 Young Engineer fieldtrips will allow your students to explore design, construction, and problem-solving skills, fostering critical thinking, collaboration, creativity as they build simple machines. Your students will also learn how forces affect movement of objects using gears, pulleys or elastic energy.

Forces and Movement:

LAUNDRY MACHINE

- Students will select the right material to construct devices that produce motion.
- Students will understand the force(s) involved when circular motion is applied to the machine.

Forces and Movement:

CATAPULT

- Students will understand the types of energy forces involved in the movement of the model (Kinetic, Potential, and Elastic energy).

Forces and Movement:

SIMPLE RACE CAR

- Students will learn about elastic force, and how potential energy (stored in the stretched elastic band) transforms into kinetic energy (motion of the car).
- Students will design and problem-solve to help optimize their cars performance.

Simple Machines -Pulleys and Gears:

WINDMILL.

- Students learn about basic components of simple machines using pulleys to drive the system and produce motion.
- Students will learn about drive and driven pulleys and what is needed to increase the speed in a belt transmission.

