



## LEARNING OUTCOMES:

# 4

## GRADE FOUR.

simple machines.  
creative and critical  
thinkers.

Join our Grade 4 field trips for hands-on STEM learning! We focus on critical thinking, problem-solving, and creativity, helping students develop innovative solutions that meet real-world needs.

*Design Meets Needs:*

### 2-LAYERED CONVEYOR BELT.

- Students will learn how this simple machine makes work easier by understand the function and mechanics of pulleys.
- Students will learn how to move an object over a long distance using a belt transmission, and how you can change directions.



*Design Meets Needs:*

### FERRIS WHEEL .

- Students will learn how to decrease the speed of this machine to ensure that the Ferris wheel does not spin too fast.
- Students will use critical thinking skills and enhance their models such as adding more seats and poles, and showing off their creativity.



*Design Meets Needs:*

### POWER PLANT.

- Students explore the mechanisms of gears, and how they transfer motion from one component to another. Students can observe how different sized gears affect speed and motion of this simple machine.
- Students will learn to use gear systems.

