

# TRANSPORTATION (40-50 LESSONS)



Students will investigate the development of transportation technology and its impact on society. The course explores the **fundamental principles of transport technology** and applies physical science concepts to design transportation systems. Students will also explore technological systems in modern vehicles, including hybrid and electric vehicle technology.

## Learning Objectives

- Explore careers in the transport sector
- Explore the development of transportation systems
- Apply the science concepts of power and torque to transportation systems
- Investigate the application of computer technology in modern vehicles
- Explore automotive engine and transmission technology
- Investigate the application of electronics technology in modern vehicles
- Investigate hybrid and electric vehicle technology
- Explore electric vehicle drive technology



## Design Projects

- A Railroad Crossing System
- A Dump Truck
- A Differential Drive System

## Typical Careers

Automobile Engineer,  
Vehicle Designer,  
Automotive Technician,  
Cargo and Freight Agent

## Lessons

- Introduction - Careers: Transportation Technology
- Transportation Technology
- Automotive Technology
- Introduction to Hybrid and Electric Vehicles

## Equipment

- Engineering Construction Kit (220-01)
- Displays and Accessories Systems Panel Trainer (752-01)

