

Robotics

Content Area: **Technology**
Course(s): **Science 8, Generic Course, Technology Education K, Technology Education 2, Technology Education 3**
Time Period: **Generic Time Period**
Length: **18 days**
Status: **Published**

Established Goals/Standards

TECH.8.1.8.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.8.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.8.B.CS2	Create original works as a means of personal or group expression.

Essential Questions

- What steps do manufacturers take to design and build a product?
- ☐ What role does robotics have in manufacturing?
- ☐ How have robotics changed how products are manufactured?
- ☐ How is energy transferred between objects or systems?

Enduring Understanding

Technology can be used to solve problems.

Content

- Building a physical robot
- Programming a robot
- Basic movement
- Arm claw movement
- Turning
- Using Sensors ~ distance, touch, color, gyro
- Programming a remote control
- How robots are used to perform work

Assessment

Students perform challenges after each topic to show they have learned that concept

Resources

- VEX Robotics kit