

KIDS LOVE TECH

School Workshops List 2018-2019

Mentored Construction Play

Teachers will select from a list of themes and building plans for their classroom. We will be using simple step by step building plans and discuss the builds using grade appropriate vocabulary. Themes: On the Farm, Cars and Trucks, Robots, Dinosaurs. Grades : K-2

Gears and Gear Trains

Build gears of different sizes and use axles and a crank to create a gear train and learn how gears are being used in machines to change the direction of movement and to create mechanical advantage. GR 3-6

Bridges and Structures

Learn about structures and forces acting on bridges and explore how different shapes play a role in engineering design. Experiment with forces of tension and compression. Using the Rokenbok Mobile STEM Labs, Students will follow a building plan to construct an arch bridge, truss bridge, beam bridge, cable stay bridge and suspension bridge.

Simple Machines - Intermediate

Build a pulley system with a fixed and moveable pulley, an Inclined plane, wedge, lever and even a screw mechanism and experience the mechanical advantage. Students will construct in teams using Rokenbok Mobile STEM Labs and following a building plan. Students will then design sophisticated mechanisms using the simple machines that they built.

Build a Crane or a Lift

Experiment with forces of push and pull and with mechanical advantage while building a crane lift to pick up construction blocks.

Electricity and Energy

Discover how chemical energy is transformed into electrical energy; explore conductors and insulators and build an electronic circuit.

Electricity and Morse Code

Experiment with electricity and experience the history of electricity while sending each other Morse code messages using electronic circuits acting as transmitters and receivers.

Systems in Action

Students will follow a construction plan to build a sophisticated system including motors. Choose from a list of projects.

Team Building with Engineering: Mechanical Arm or Catapult challenges

Build a mechanical arm that can be used to grab various objects or a catapult that is used as a lever. After building the project in teams, students will participate in group competitions

Systems in Action - Robotics (Series of workshops or full day)

Students will follow a construction plan to build a sophisticated machines including motors, sensors and programming with Arduino. (GR 6 and up)

Book a workshop: info@kidslovetech.com