# KCC Education Program's Makerspace Located in V117





Makerspaces provide hands-on, creative ways to encourage students to design, experiment, build, and invent as they deeply engage in science, engineering, and tinkering.

**Explore with us!** 

### The Maker Movement

The Maker Movement Makerspace grew out of Maker Media, the force behind MAKE magazine, and Maker Faire, a leader in the Maker movement. We want everybody who participates in our Makerspace to see themselves as Makers.

What makes a Maker?

- Makers believe that if you can imagine it, you can make it. We are productive; we are creative Makers seek out opportunities to learn to do new things, primarily through hands-on experiences.
- Makers surprise and delight those who see their projects, even though the projects can be a bit roughedged, messy, and, at times, over-stimulating.
- Makers comprise a community of creative and technical people who help one another do better. They are open, inclusive, encouraging, and generous in spirit.

# **Makerspace Projects**

Every Makerspace is unique and the projects that are worked on inside of them are also very diverse. Here are just some of the things you can do in our Makerspace:

- Coding
- 3d printing
- Laser cutting

- Electronics
- Robot building / Robotics
- Learn about Circuits and Electricity
- Inventing

Ed program Makers celebrate other Makers — what they make, how they make it, and the enthusiasm and passion that drives them!

# What can you find in our MakerSpace?

# **Squishy Circuits**

Squishy Circuits uses conductive and insulating play dough to teach the basics of electrical circuits in a fun, hands-on way. Let your creations come to life as you light them up with LEDs, make noises with buzzers, and spin with the motor.









### **Strawbees**

These simple straws and connectors can offer hours of fun. In a learning center or for a play break, students can build on their own or use the idea cards in the Strawbees kits. Construct a house or even a skyscraper. Build a glider or a helicopter. Students can play freely with Strawbees or build to meet a specific challenge.



### **3D Printer**

3D printing offers tremendous benefits for students that help them gain valuable hands-on learning experiences, develop problemsolving and critical thinking skills, and explore their creativity, which any student can take part in or access today.



### **KIBO**

KIBO is a robot kit specifically designed for children aged 4-7. Children build their robot with KIBO, program it, and decorate it to do what they want. The child creates a sequence of instructions (a program) using the wooden KIBO blocks.



# **Simple Machines**

Students discover how simple machines make work easier...as they build realistic models and perform hands-on experiments! Ideas for hands-on experiments are on the cards that walk students through how to develop and use a pulley, an inclined plane, a wheel and axle, and more. The cards also include information on the back that explains each machine and how it's used in the real world!



# **Makey Makey**

This is an invention kit designed to connect everyday objects to computer keys. Using a circuit board, alligator clips, and a USB cable, the toy uses closed-loop electrical signals to send the computer either a keyboard stroke or mouse click signal.



# **Magnet Tiles**

Encouraging creativity and imagination:
Magnetic tiles provide an open-ended
platform for children to build structures and
objects based on their own ideas and
designs. This allows children to express
their creativity and imagination in a handson way and to experiment with different
shapes, patterns, and designs.



### **Robot Mouse**

Develops Critical Thinking, Coding Skills, and Problem-Solving. As students learn to program, they build key skills, including critical thinking, problem-solving, sequencing, and programming fundamentals. ROBOT MOUSE: Colby lights up, makes sounds, and features two speeds along with colorful buttons to match coding cards for easy programming and sequencing.



Stop by V117 to explore these materials, and visit often as new materials will be added!

