## **Engineering Pathways**

Mobile STFM Lab



Brand Kid Spark Education
SKU 35051
Product Name Engineering Pethyleye Mebile STEM

Product Name Engineering Pathways Mobile STEM Lab

Number of Students 4

Hours of Curriculum	120+
Curriculum	Included
SRP	\$699.99

### **Engineering Pathways Mobile STEM Lab**

The Engineering Pathways Lab supports Kid Spark's Elementary (3-5) and Middle School (6-8) programs and covers a broad range of technologies and curriculum. Students learn about mechanisms and movement, applied mathematics, programmable robotics and computational thinking, simple and compound machines, and rapid prototyping & 3D printing. Students drive their own learning through hands-on design and engineering challenges by defining problems, asking questions, and challenging their own thinking to learn through iteration.

This lab features two robotic platforms (remote control and programmable). The easy-to-use remote control Maker ROK-Bot requires no programming and makes the study of motorized mechanisms and machines easy and fun. The programmable ROKduino (Arduino-compatible robotics controller) introduces students to coding, sensors, motors, and autonomous robotic design. Students with little to no coding experience start with simple and intuitive drag and drop block coding and can transition to text-based coding when they are ready.

Resources for this lab include access to the Kid Spark curriculum library, online teacher lessons plans, student curriculum packets and workbooks, instructional videos, teacher tutorials, ready-made program sketches, and a digital 3D parts library.



- Over 371 reusable engineering building components
- · One lab serves 4 students
- Multiple labs can be stacked on a single rolling base
- The Kid Spark curriculum follows the NGSS Three Dimensions of Science Learning: Crosscutting Concepts, Science and Engineering Practices, and Disciplinary Core Ideas.

# Curriculum Units Supported:

#### **STEM Fundamentals (3rd-5th)**

- Mechanisms & Movement
- Applied Mathematics (Coming 2019)
- Robotics 101
- Robotics Exploring Sensors

#### **Applications in Design & Engineering (6th-8th)**

- Kid Spark Basics
- Simple Machines
- Compound Machines

#### **Systems of Technology (6th-8th)**

- Rapid Prototyping & 3D Printing
- Robotics & Coding 101
- Robotics & Coding Sensors
- Integrated Engineering Challenges (Coming 2019)
- Advanced Engineering Challenges (Coming 2019)





Engineering Pathways Mobile STEM Lab

Dimensions: 19" x 17" x 13" Shipping Dimensions: 20" x 18" x 20" Shipping Weight: 24 lbs. Item# 35051 / \$699.99 (SRP)



**Rolling Base** 

Dimensions: 18" x 18" x 7" Shipping Dimensions: 19" x 18" x 8" Shipping Weight: 9 lbs. Item #35057 / \$59.99 (SRP)



Stack and secure multiple labs to a rolling base for easy mobility.





# Interested in teaching both the Elementary & Middle School Programs?

It's easy! By pairing the ROK Blocks Mobile STEM Lab with the Engineering Pathways Mobile STEM Lab you can teach ALL the curriculum that Kid Spark Education offers.

The Kid Spark curriculum moves progressively through four overarching learning phases and provides over 144 hours of curriculum.

- Foundational Fluencies
- STEM Fundamentals
- Applications in Design & Engineering
- Systems of Technology

50-01296-001

