



Civil Air Patrol/Aerospace Education Member's

# STEM Kit Program



**AVIATION**

**SPACE**

**CYBER**



**ANGLEGS**



**BUILD & LEARN GEOMETRY**



**CROSS COUNTRY NAVIGATION**



**FLIGHT SIMULATOR**



**OUTDOOR QUADCOPTER**



**INDOOR QUADCOPTER**



**REMOTE-CONTROLLED AIRCRAFT**



**BRIDGE BUILDING**



**SNAPTRICITY**



**VTOL**



**ASTRONOMY**



**HYDRAULIC ENGINEERING**



**MECHANICS**



**RENEWABLE ENERGY**



**ROBOTICS**



**ROCKETRY**



**WEATHER STATION**



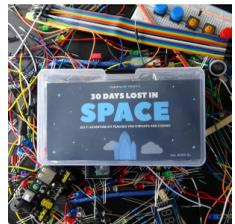
**BEE-BOT/  
CODE & GO MOUSE**



**LET'S GO CODE!**



**RASPBERRY PI**



**30 DAYS LOST IN SPACE**



**SPHERO**

### **30 DAYS LOST IN SPACE**

Fix your crashed spaceship to make it home successfully by learning coding, programming and wiring skills

### **ANGLEGS**

Build, identify, and classify 2-D figures using activity cards

### **ASTRONOMY**

Gaze into the skies to see planets and stars with this easy-to-use telescope

### **BEE-BOT/CODE & GO MOUSE**

Use arrow keys on a floor robot and gridded mat to introduce programming to early learners

### **BRIDGE BUILDING**

Design structurally sound bridges while using problem solving to implement changes in the designs

### **BUILD & LEARN GEOMETRY**

Create geometric shapes to solidify understanding of perimeter, area, and volume

### **CROSS COUNTRY NAVIGATION**

Learn to use navigational tools

### **FLIGHT SIMULATOR**

Practice flying with yoke, rudder pedals, flight simulation software and training booklet

### **HYDRAULIC ENGINEERING**

Build simple machines designed as a hands-on introduction to hydraulic engineering

### **INDOOR QUADCOPTER**

Develop experience flying UAVs with this small indoor quad

### **LET'S GO CODE!**

Introduce young children to early coding and programming ideas without electronics

### **MECHANICS**

Design and build complex concepts using cams & cranks

### **OUTDOOR QUADCOPTER**

Increase your skills at flying an outdoor unmanned aerial vehicle (UAV)

### **RASPBERRY PI**

Introduce computer coding, embedded systems, and digital sensors

### **REMOTE-CONTROLLED AIRCRAFT**

Build/fly balsa planes; control computer-based RC flights; fly actual RC model aircraft outdoors

### **RENEWABLE ENERGY**

Bring renewable energy to life by investigation solar, wind, and water energy

### **ROBOTICS**

Assemble and program robots with this complete robotics engineering system

### **ROCKETRY**

Ignite and interest in aerospace by building and launching rockets

### **SNAPTRICITY**

Investigate electricity, closed circuits, switches and more

### **SPHERO**

Explore programming with Sphero using a free app and your personal smart device

### **VTOL**

Maneuver taking-off and landing this aircraft vertically

### **WEATHER STATION**

Record and study aspects of weather using the weather sensor and data collection kit