

# U-SOLDER IT

These Lab Packs are SparkFun's classroom entry point. By combining the ProtoSnap, LilyPad, SparkFun Inventor's Kit, or Redboard Through-hole Soldering Kits with support materials, SparkFun has brought the power of the open-source community to the classroom. The lab pack is an economic classroom solution available only to educators and includes one free seat in *Intro to Arduino Class* at SparkFun.

The Arduino programming environment is a free downloadable program that makes getting started in embedded electronics easy. Arduino uses a simplified version of the C programming language and students, parents, and teachers will have access to example programming files to guide them along the way. Arduino also works flawlessly with Processing, a program that gives users the ability to create easy-to-use interfaces and data visualization. Have students solder the microcontrollers and then use them in the classroom!

SparkFun packages together everything educators need to get started and the Lab Packs are designed to work in many different classrooms. Examples, presentation files, projects, tutorials, and editable curriculum are all available from SparkFun and Arduino. Make your classroom part of this new educational movement!

#### Users will learn about:

- Soldering
- Blinking LEDs
- Controlling a toy motor
- Controlling a servo
- Making (bad) music
- Responding to buttons
- Twisting a volume knob
- Detecting ambient light
- Reading temperature
- Controlling big devices
- Mixing LED colors
- Sensing Flex

We believe these to be the building blocks of any electronics project. Once these concepts are mastered, very impressive projects are possible using simple recombinations.



#### PACK INCLUDES:

- 10 SIK Kits
- 10 Arduino Unos (SMD version)
- 10 Arduino Circuit Overlays
- 10 SIK Base Plates
- 10 SIK Guides
- 10 Clear Breadboards
- 10 Batch PCB Brochures
- 10 Batch PCB Reference Boards
- 10 FTDI A to B Micro Cables
- 10 Arduino Compatible Microcontrollers

10+

We recommend this kit for beginners ages 10 and up.

