Soft Circuits Design Challenges
Craft Supplies Shopping Lists

** Consult the book for additional supplies for extension ideas and other classroom teaching ideas.

Soft Circuits Design Challenge 1:
Introduction to the Electronic Circuit

A. Additional Materials for electronic circuit play:
- A variety of conductive and nonconductive materials (paper clips, conductive thread, conductive fabric, buttons, pencils, fabric, tinsel, coins, etc.)
- Graphite pencils
- Distilled water
- Salt

B. Other supplies to have handy for group activities:
- Paper
- Scissors
- Sticky notes or 3” x 5” index/note cards with tape

** NOTE: This challenge is repeated in the book Short Circuits

Soft Circuits Design Challenge 2:
E-Cuffs

A. Additional E-Cuff Planning Materials:
- Paper, colored pencils, markers, and/or crayons

B. Essential Supplies for MAKING an e-cuff:
- 9” x 2” pieces of felt in multiple colors
- Regular thread
- Pincushions
- Fabric glue or low-temperature hot glue (to hold knots)
- Scissors
- Decorative materials like assorted buttons, fabric markers, glass beads, gems, or other materials

Soft Circuits Design Challenge 3:
ElectriciTee

A. Additional ElectriciTee Planning Materials:
- Planning materials like paper, colored pencils, markers, and/or crayons

B. Essential Supplies to MAKE an ElectriciTee:
- T-shirt (new, used, or thrift-store purchase)
- Scissors
- Fabric glue or low-temperature hot glue (to secure knots)
- Regular, nonconductive thread
- Pincushions
- Decorative materials, like fabric markers

Soft Circuits Design Challenge 4:
Solar-Powered Backpack

B. Essential Supplies for MAKING a solar-powered backpack:
- A backpack (new or recycled)
- Fabric glue or low-temperature hot glue (to secure knots)
- Scissors
- Tweezers
- Decorative duct tape
- Regular, non-conductive thread

*IMPORTANT! You will also need a Flexible Solar Panel (not available through Sparkfun)
Consider purchasing this item (the PowerFilm Flexible Solar Panel—MPT6-7.5) from one of the following sites:
Amazon.com, flexsolarcells.com, roboshop.com, or Jameco.com