LilyPad Electronic Fashion

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what we’re making
morning overview

• design
• build, test
• build, program, test
• build, program, test
• play!
what you should have

- clothing or accessory
- laptop
- LilyPad Pro kit
  - LilyPad Arduino
  - battery holder
  - programmer
  - USB cable
- LilyPad LED
- conductive thread
- conductive fabric
- speaker
- needles
- AAA battery
stuff we’ll share

• irons
• multimeters
• scissors
• nail polish & glue
design
step 1: power supply & LilyPad
thread your needle
sew + to + and – to –
seal your knots
step 2: speaker
sew one end of speaker to + and the other to pin 9
program & test
set up for programming

- go to: http://media.mit.edu/~leah/LilyPad
- configure the software (2. software install)
- open the sound sample code (7. sound)
- paste the code into your Arduino window
load the code onto your LilyPad

• go to step #3 on the 4. lights(LEDs) page for reference
• press the reset switch on the LilyPad
• quickly press the upload button in the Arduino software
• wait…and listen
step 3: sensor
cut out your patches
iron them on
sew one patch of fabric to – and one to a0
program & test

• go to step #3 on the 4. lights(LEDs) page for reference
• code:
  www.media.mit.edu/~leah/LilyPad/etech_soundie_code.html
play!
after today

• washing
  • remove battery
  • hand wash
  • drip dry
• wearing & wear
  • silver tarnishes: silver polish, fabric paint
  • platings crack
after today cont.

• where to get stuff
  • electronics: SparkFun, Maker Shed, etc.
  • materials: lessemf.com, media.mit.edu/~leah/grad_work
• community
  • Arduino: arduino.cc, ladyada.net
  • LilyPad: Flickr group, LilyPad Arduino tags on Flickr, Instructables, etc.
Thank you!

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