



# Electrical Circuit Game Projects

Handout available at: <http://tinyurl.com/electricalgames>

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## NGSS Engineering Practices

- Defining Problems
- Using computational thinking
- Constructing Solutions
- Planning and carrying out investigations

[Link to video examples](#)

### Electrical components:

Alligator clips: 10-pack for \$7-10, <http://www.jameco.com> or Amazon

2xAA battery holders: \$0.69-\$0.89ea, <http://www.jameco.com>

Lever switches: \$0.20-\$0.50ea, Amazon, EBay or Jameco

3-6V Buzzers: \$0.50ea eBay

1.5-3V Toy motors: Approx \$1each on Amazon if bought in bulk

¼" Copper tape: \$9/roll on Amazon

Tilt switches, reed (magnetic) switches, Vibration motors (eBay)



### Cardboard tools:

Power cutter: WORX Zipsnip (approx \$27 on Amazon)

ER/Trauma shears: Approx \$5-12 on Amazon



### Other tools/supplies:

Hot glue guns

XMAS lights: free, cut from donated XMAS light sets

Aluminum Foil

Packaging tape

Marbles, balls, steel balls



### Computer/Chromebook coding connection:

Makey-Makey kit (roughly \$50) - many online stores including Amazon <http://www.makeymakey.com/>

Scratch free web-based Block Programming environment - <http://scratch.mit.edu>

