

<https://makezine.com/2006/04/11/how-to-make-a-tictac-flas/>
<https://www.instructables.com/id/Tic-Tac-flashlight/>

Use rechargeable AAAs at ~1.2v each and skip the resistor. I used some generic Chinese Ni-Mh ones from Fry's. That way when my toddler leaves it on, we just recharge the batteries.

Tic -Flashlight:

Supplies: 2 Triple A Batteries, empty Tic Tac Case, resistor, small button, LED
Experiment Steps:

Stuff We Already Taught Them

1. Who remembers the project we did a few weeks ago, PVC, cloth, soda cans,
 - a. **ASK** what they remember about Static Electricity
 - i. We learned that electricity occurs when electrons jump from place to place and move around

CIRCUITS/WIRES

2. **ASK** What's one thing that a lot of electrical devices have? Wires!
 - i. These wires act as highways, and it allows this flow of electrons, or electricity, to get from place to place
 - b. When wires are put together with a whole bunch of other stuff, like motors, light bulbs, and batteries, it creates what's called a circuit

SCHEMATIC

1. Every time someone is about to build something, they use a blueprint
 - a. Before scientists and engineers create circuits, they have their own version of a blueprint, called a **schematic**!
 - b. Before we make our flashlights, we're going to show you how to make a schematic!
2. Show them the symbols for different things, motors, batteries, wired, resistors