

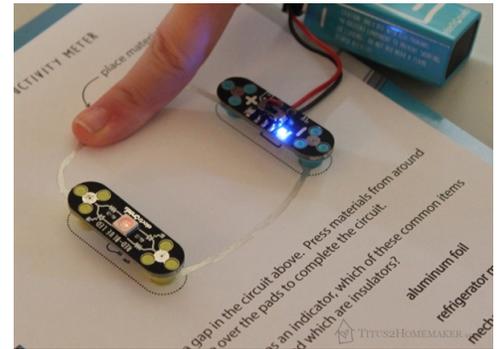
CircuitScribe {review}

[CircuitScribe](#) is, hands-down, one of my favorite review items in a very long time. We got the kit to review as a fun-but-educational (but mostly fun) toy. And it is fun. But I'm also super-impressed with it as a learning tool and think it would make a fabulous addition to a homeschool program.

What is CircuitScribe?

The basic idea behind CircuitScribe is that you can “draw” your circuits. There's no need for wiring because the kit comes with a pen containing silver-infused ink, so it will conduct the current from one component to another. The components are then designed to be placed on the drawing (and adhered with magnets to ensure firm contact), so they can be mixed, matched, and rearranged.

That's already a pretty awesome concept — and what caught our attention initially — but when we actually received the kit and then put it to work, we found more in the execution of the concept to impress us.



Learn Circuitry

The kit comes with a book. It's spiral-bound so it lies flat, and it tells you everything you need to know about using the kit. But this is more than just an “instruction book.” It actually walks you through the basics of circuitry. Each concept gets about a page, and there's a simple-but-thorough explanation, followed by a hands-on exercise to practice it.

(The pen is similar to a gel pen, and we did have a little trouble with it skipping once or twice, but not too badly.)

It starts from the very beginning, with the concept of conductivity. The concept is explained, then the child builds a little conductivity tester (basically, an open circuit, with a spot to bridge the gap with various objects). This allowed us to not only explore conductivity, but also to practice using the scientific method: guessing which objects would or would not conduct (hypothesizing), then testing and observing. We gathered together these items from around the house:

Then Sophia sorted them into two groups — those she expected would insulate:

(The mechanical pencil lead was to be tested outside of its case, but we didn't want to take it out ahead of time and increase the risk of breakage.) And those we expected would conduct. Then we got to work testing. There were a few surprises, but for the most part, her hypotheses were correct. The book also contains lessons about LEDs, resistors, switches, etc.

We haven't even gotten all the way through the book yet, and Sophia and Mama have both learned a lot. And we've had a lot of fun. It's been a really good way to question and explore, even without using (nearly!) the full breadth of the kit. For instance, after discovering that pencil lead does conduct, we decided to see whether the circuits could be drawn heavily with pencil. The answer: this technically works, but the conduction is extremely weak.

Sophia also thought it was cool that, since the components are magnetic, she could stick a circuit to the fridge.

What Do You Get?

We're working with the Ultimate Kit (the largest one), and you'll be able to see from my pictures just how little of the kit we've used so far. It felt like the box just kept going and going! When you open it, you see this:

Remove the book (and a sheet of foam padding), and you see these. But wait; there's more! Remove that tray, and there are more components hiding underneath. (The last two components aren't missing. I didn't realize until after I'd taken the picture that they'd "jumped" out of their slots. They're stuck together over there on the left.)

Under the lowest trays are the steel sheet (that enables the components to magnetically adhere to a page), and jumper stickers. The components are all color-coded based on what category they fit into.

The components can then be combined in a variety of configurations, together with the connections and "pads" drawn with the silver pen.

Get it!

CircuitScribe is offering my readers 15% off anything on their site (www.CircuitScribe.com) through November 21st. Use coupon code TITUS15 to get your discount. (If you're an avid Amazon shopper, [Amazon has them](#), too, but of course you won't get the discount.)

Source: <http://titus2homemaker.com/2016/11/circuitscribe/>

