## ETUDE 1



This small clock is very sentimental to me as it is a memory of my grandmother who passed away long ago. My grandmother had many gadgets in her home but for some reason, this clock reminds me the most of her. This clock holds the shape of a grandfather clock; it is around 3 inches tall, it is completely gold but the interior is made of dark red felt. It is able to tell time when there's a working battery inside. It has many details on it and is very light weight. This small clock conducts electricity as it is made of metal.



This candle is made in the USA and was purchased from Bath and Body Works. The candle is about 3-4 inches tall and 3-4 inches wide. It is a 3 wick red candle called Spiced apple Toddy. It smells like cinnamon, apple, and Christmas. The candle is contained in a glass cylinder with a removable metal cover. The metal cover is detailed with repeating triangles. There is about half of the candle left. It was made in the USA. The wax, the wicks and the glass container all do not conduct electricity however, the metal cover does conduct electricity.



I found this ring hiding in the sand of my local park as I was scavenging for objects. It is the color silver and holds a very large and probably fake diamond. Is it very light and doesn't shine much which leaves me to believe it doesn't have much value to it. The band is not too thick and the diamond protrudes up quite a bit. Conveniently, the ring fits my finger quite well. Due to the metal in the band, the ring does conduct electricity. However, when I attach the multimeter to the diamond itself, there is no electricity passing through.

## **EXAMPLES**

SIRCUIT 1





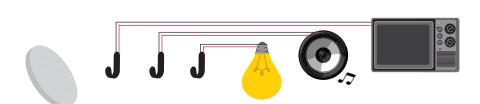
If the candle is on and the cover is off, the light remains off. If the candle is off and the cover is over the candle, the light will turn on. This circuit allows there to be a never ending source of light.

CIRCUIT 2



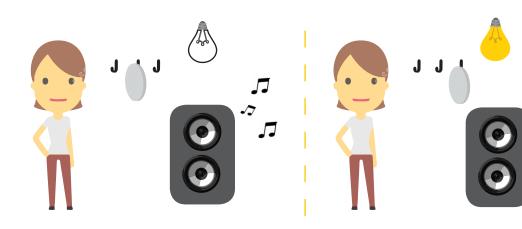
The player must try to throw the metal cover on the glasses. If the cover lands on a glass, the light which begin to flicker.

**IRCUIT 3** 



The metal cover switches on the appropriate action depending on which hook it is set on. If it is set on the first hook, the light turns on. If the second hook, the radio tuns on. If the third hook, the microwave turns on and makes popcorn.

## **STORYBOARD**



Circuit 3 was my favorite circuit...

In the first illustration, I have hooked the metal plate to the second hook because I wanted to listen to music. Seconds later, the radio turns on but the light remains off and there is no popcorn being made because those switches are off.

In the second illustration, I was tired of listening to music but wanted to see so I put the metal plate on the last hook to trigger the light.