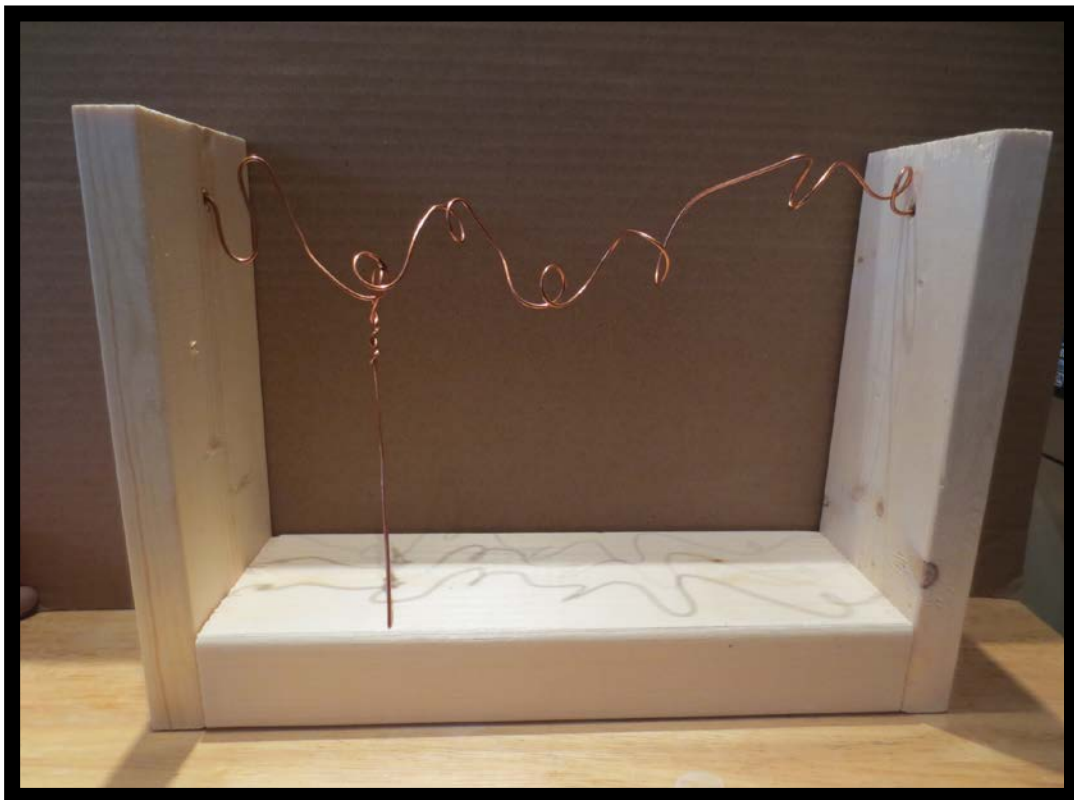


# BUZZ WIRE CIRCUIT

*Introduction to electricity concepts.*



S.D. #33 - Chilliwack



## Tools & Materials:

- 1 9V Battery
- Mini light and Buzzer
- Copper Wire - free of insulator plastic
- Wood Frame - 1 piece of 2"x4"x10" and 2 pieces Of 1"x4"x8"
- Alligator Wire clips
- 4 - #8 x 1 1/4" wood screws
- Drill with Robertson Driver bit and 3/16" & 1/8" Drill bits

### I. Gather Materials



2.. On the 2 pieces of 1"x 4"x 8" mark out a whole on one end of both pieces that is approximately in the center of the wood and 1 " away from the top edge. Using the drill, and the 3/16" drill bit, drill out both holes.



3. On the opposite end from the large hole, drill two pilot holes using the 1/8" drill bit. They should be 3/4" from the bottom and side edges.



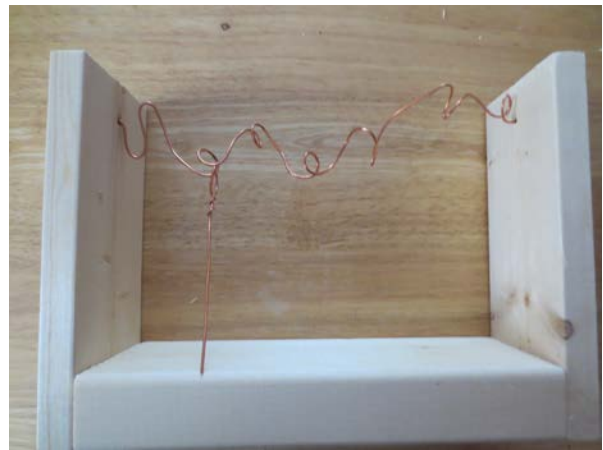
4. Now using the Robertson driver bit and the #8 screws, assemble the side pieces to the 2"X4" base.



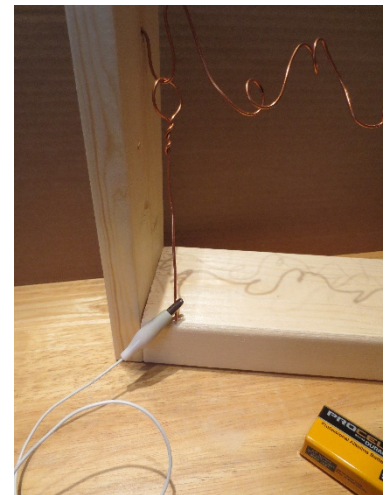
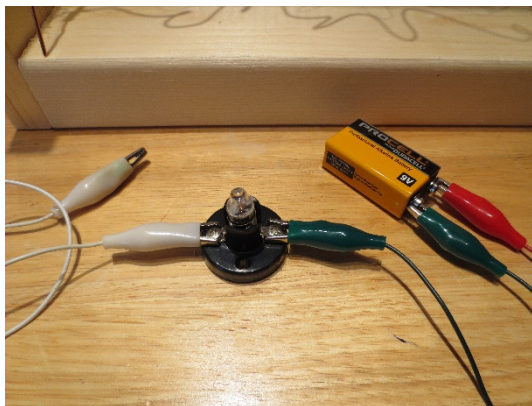
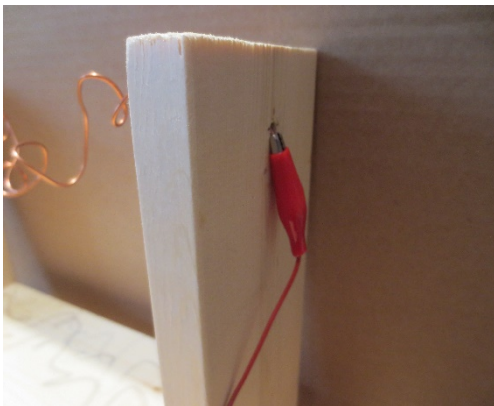
5. Using a smaller piece of the copper wire - design and make your wand. The smaller the round area is the more difficult the challenge will be. You can use a pen or felt maker to wrap the copper around.



6. With a larger piece of the stripped copper wire, design a twisted and wrapped maze. Each end of the wire should be pushed through the single hole at the top of your wooden frame and bent down to hold it in place. You need to add your wand to the maze at this time. .



7. The last step is to assemble the electronic components using the alligator wire clips.



8. The game is now live. The challenge is to go through the maze without making the light or buzzer sound as fast as you can. Disconnect all components to store.