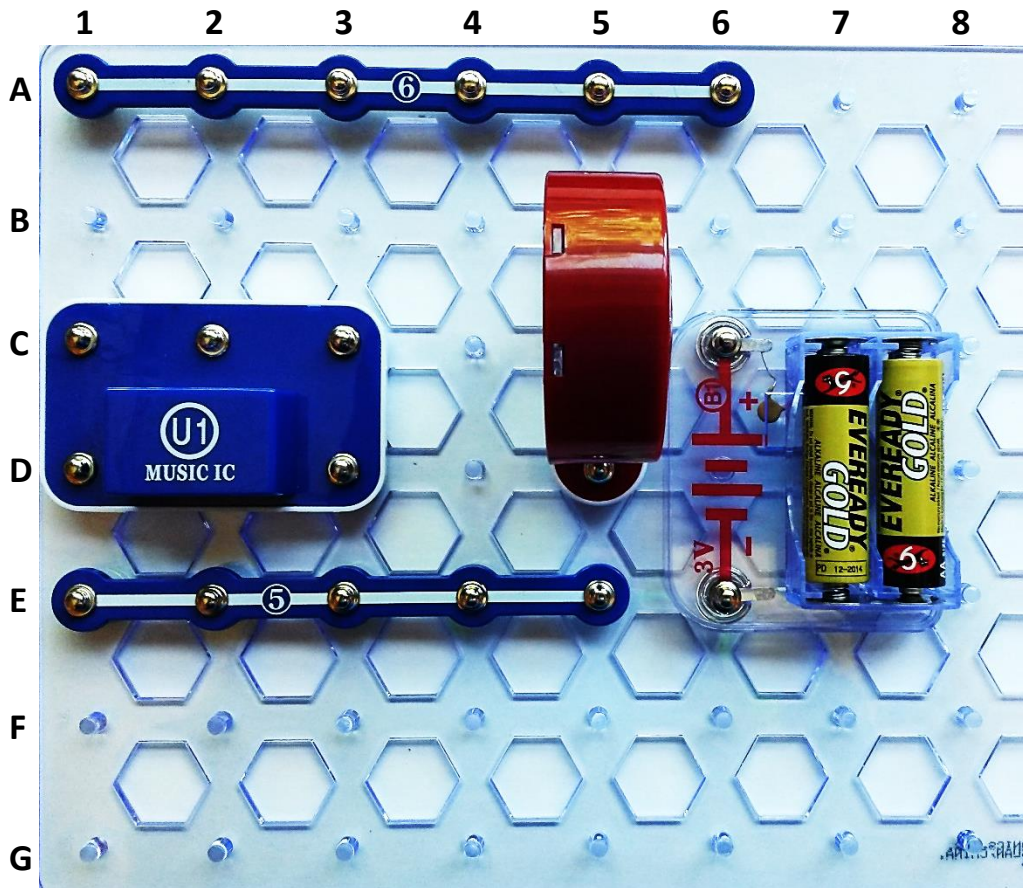


Exploring Sound: Circuit Set-Up Instructions

Letters and Number appear on the Snap Circuit Boards to help you with appropriate spacing.

1. Obtain:
 - Snap Battery holder with 2 AA batteries
 - One 6 snap connector
 - One 5 snap connector
 - Music IC (U1)
 - Snap Speaker

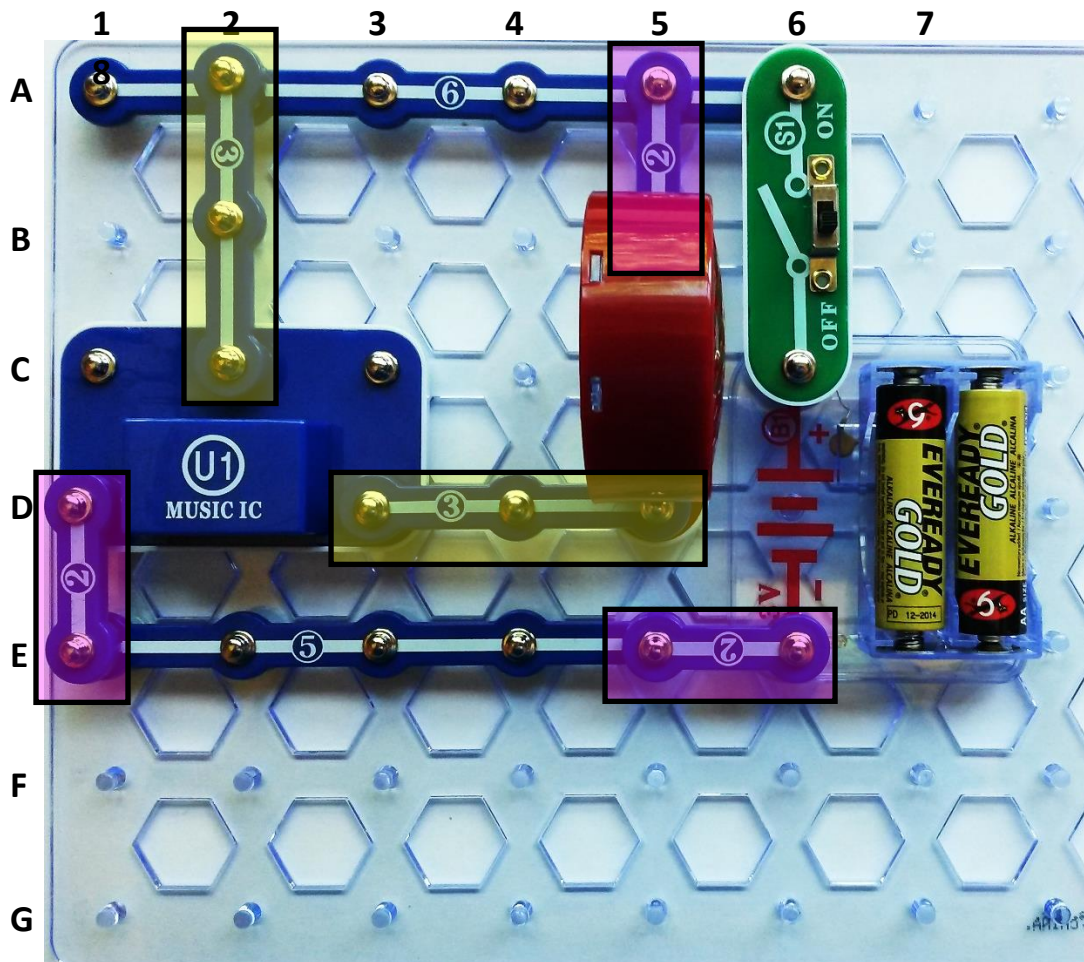
Place them on the board as shown in the picture below.



2. Next you will need:

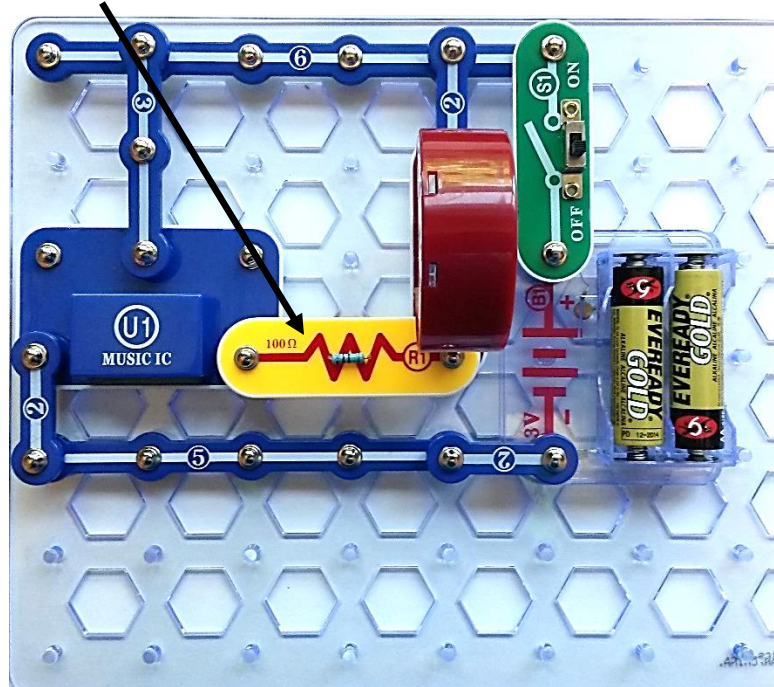
- Two **3 Snap connectors**,
- Three **2 Snap connectors**
- Snap Switch (S1)

Complete the circuit as shown below:

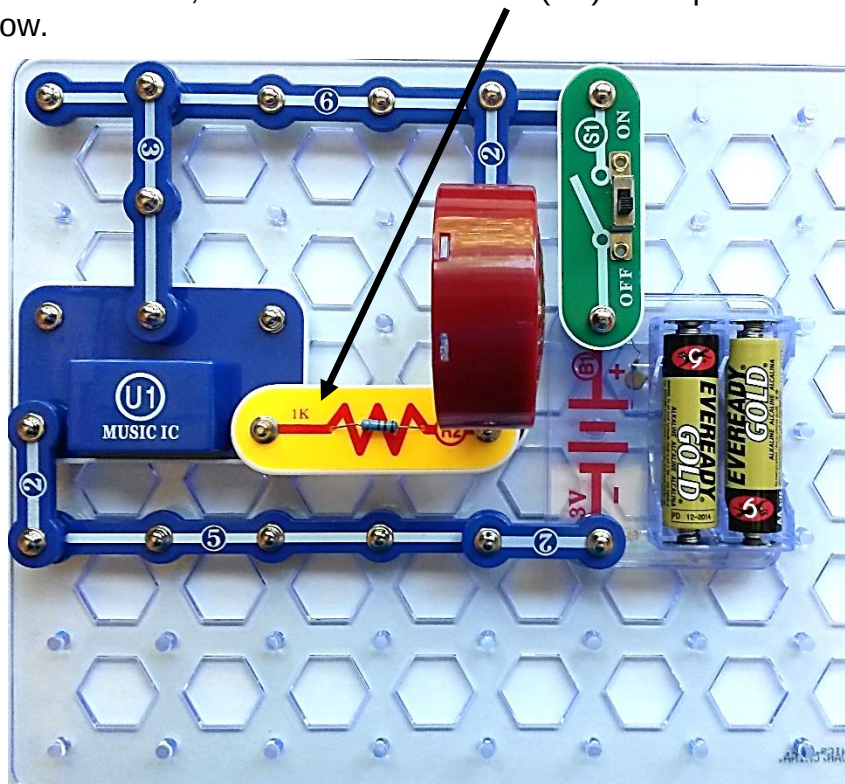


This completes the circuit. Have your circuit checked. Once it is checked, you may push the switch to the “on” position.

3. Turn the switch to off. When you are ready to experiment with volume, remove the 3 Snap connector that links the Music IC (U1) to the Snap Speaker. Replace this piece with a **100 Ω** resistor (R1) as shown in the diagram below.

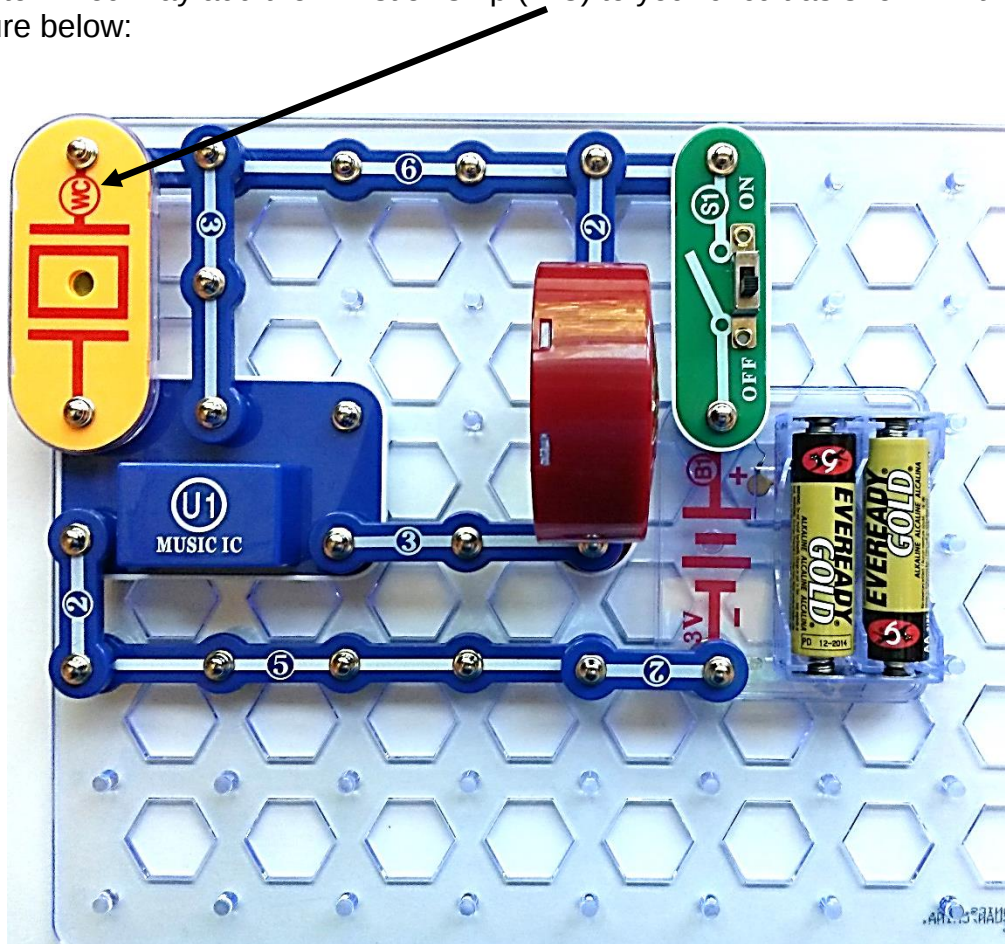


4. Turn the switch to off. Remove the 100 Ω resistor (R1). Replace this piece with a stronger 1000 Ω resistor; which is denoted at 1K (R2). The placement of R2 is shown below.



5. Adding the Whistler Chip (WC).

Turn the switch to off. Start by restoring the circuit so that there are no additional resistor. You may add the Whistler Chip (WC) to your circuit as shown in the picture below:



Once you have turned the circuit on and allowed the song to play entirely, you may clap above the WC or tap on the surface of the WC and the song should play again.