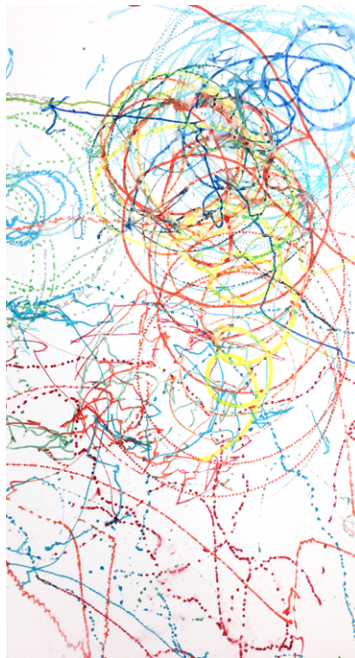


Drawbot

Drawbot wiggles across paper, doodling fun designs with its marker legs. It's both engineering and art!



Subject(s):

- Engineering
- Art

Experience Level:

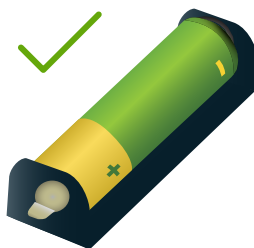
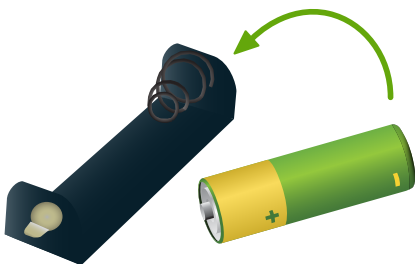
Beginner

Supplies:

- Paper Cup or Bowl
- Markers (3)
- DC Motor with Battery Pack
- AA Battery (Quantity determined by motor)
- Electrical Tape
- Clothes Pin
- Scissors to cut the tape (optional)

Assembling the Motor

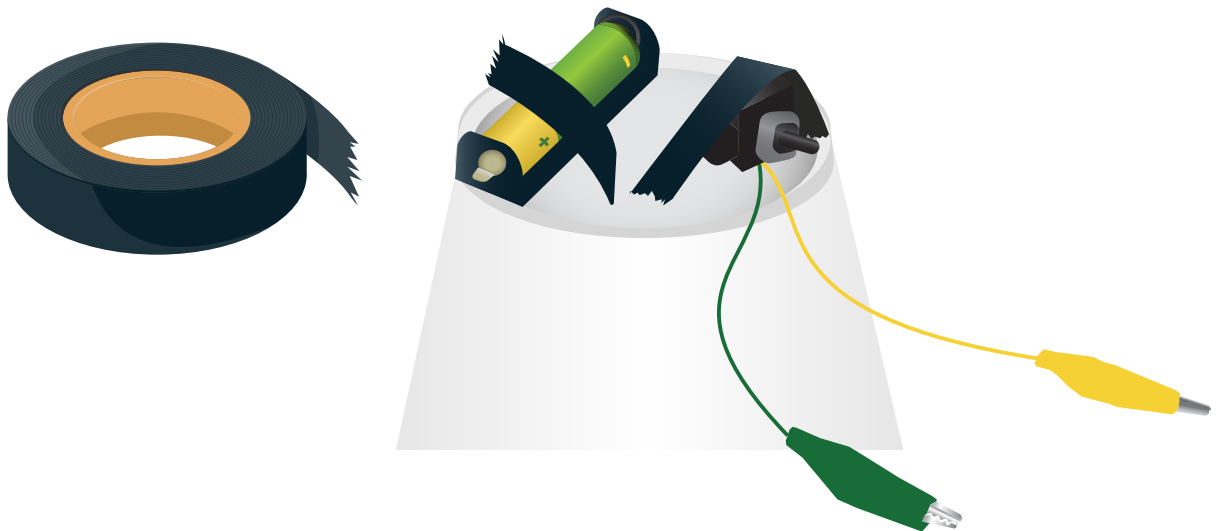
- 1) Insert the battery (or batteries) into the holder. There are many kinds of DC motors: It's okay if yours looks a little different.



- 2) Use the electrical tape to attach the battery holder to the top of the cup (or bowl).

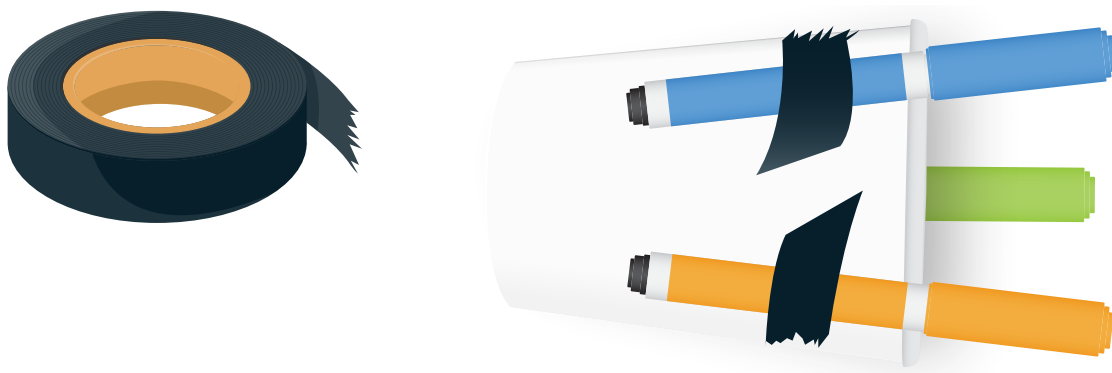


- 3) Next, use the electrical tape to attach the motor to the top of the cup (or bowl).

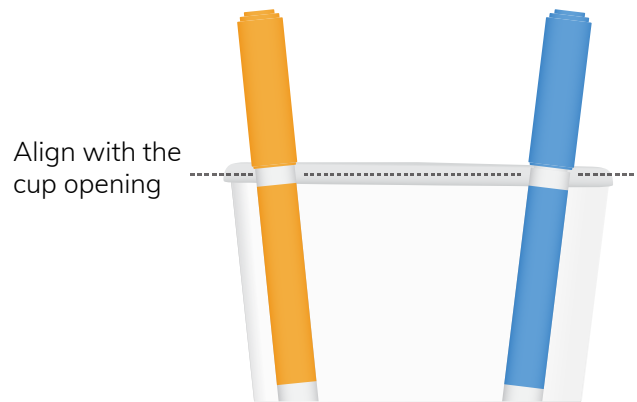


Attaching the Markers

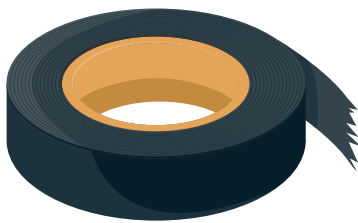
- 1) Lightly tape the three markers evenly around the edge of the cup, with the tip of the (still capped) markers facing toward the opening of the cup. You can adjust the placement of the markers until they seem evenly spaced.



2) Adjust the markers so the caps align with the opening of the cup.



3) Add more tape to really secure those markers!



Attaching the Counter-Weight and Leads

1) Attach the clothes pin to the part of the motor that spins.



2) Test your creation! Attach the leads to the metal tabs on either side of the battery holder.



Decorate your Drawbot!

Add some character to your robot. Use markers, googly eyes, pipe cleaners or pom-poms!

