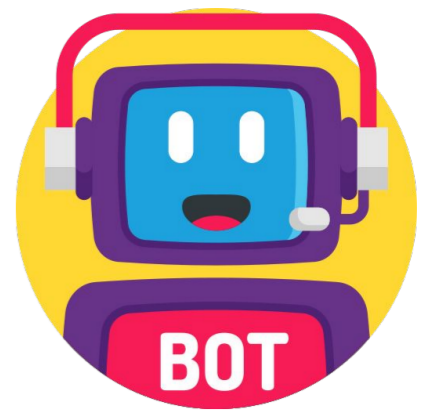


HOW TO MAKE A SCRIBBLE BOT?



DEFINE

Design Challenge



Design and create a robot that can autonomously scribble and draw on paper.

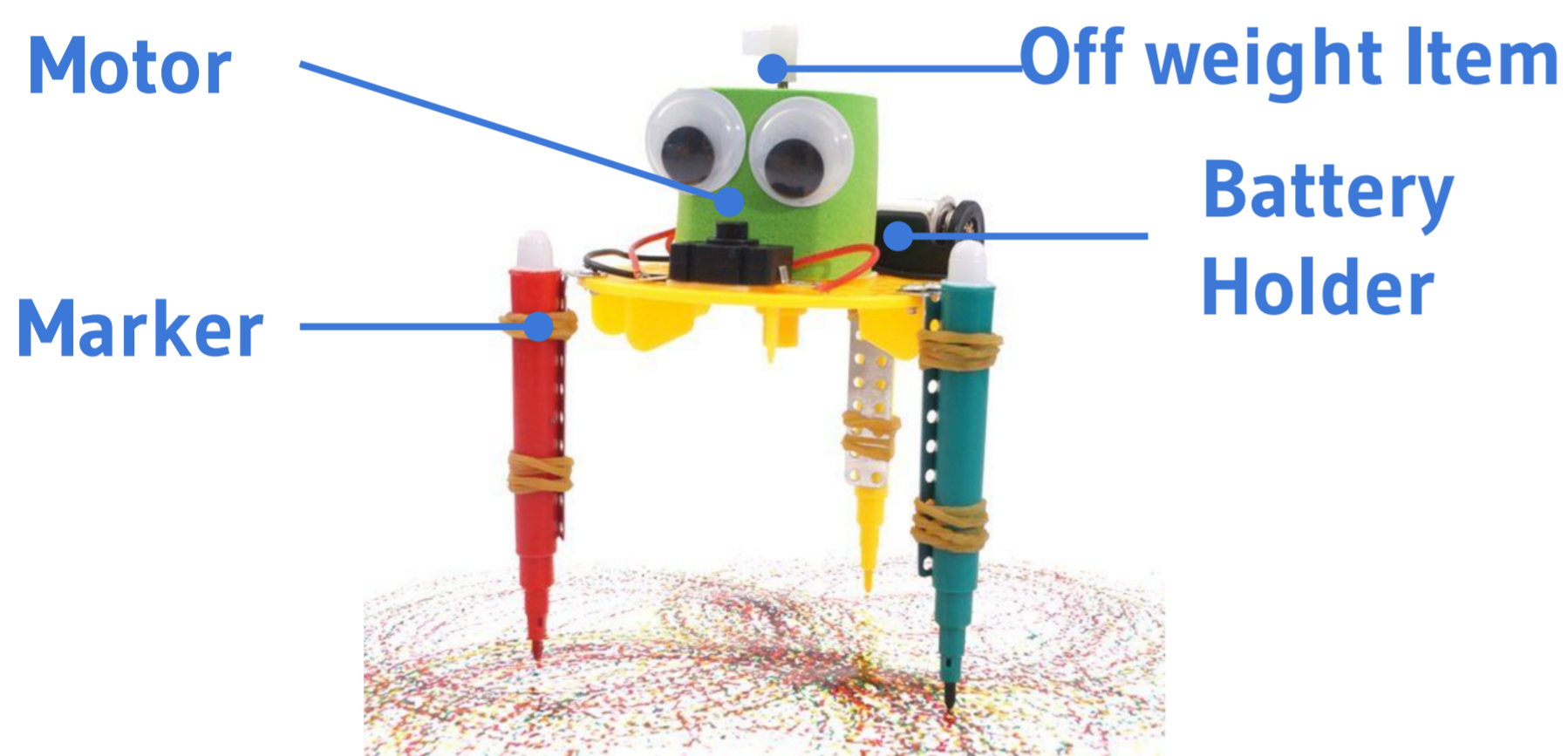


Scan the QR code to see the Scribble Bot in action!

IDEATE



What is a scribble bot?



Scribble Bot is creative creation that uses markers, vibrating motors and or other components to create unique and colourful art.



Let's think about it!

When designing your scribble bot, consider the following:

- What do you think a scribble bot is?
- What could it do? What could it look like?
- Do you want your scribble bot to move? How?
- How might you combine the materials available to make a scribble bot?

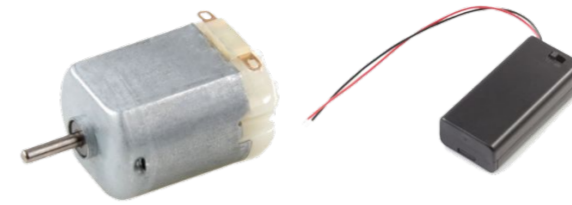


MAKE



Building Your Scribble Bot!

1

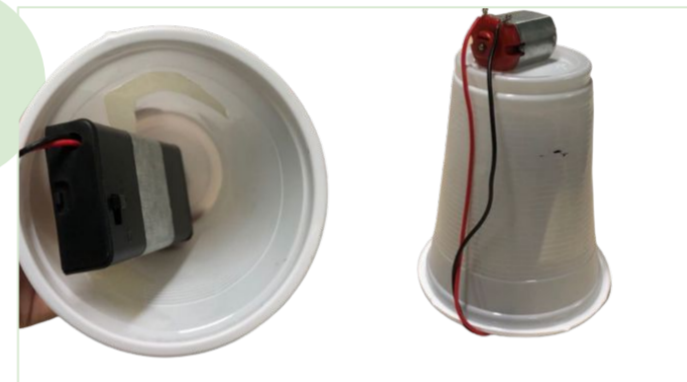


Try making the motor spin. Can you also make it spin the other direction?

Motors and batteries have 'positive (+)' and 'negative (-)' ends. If connected one way, the motor will spin in one direction. If connected the other way, the motor will spin in the opposite direction.

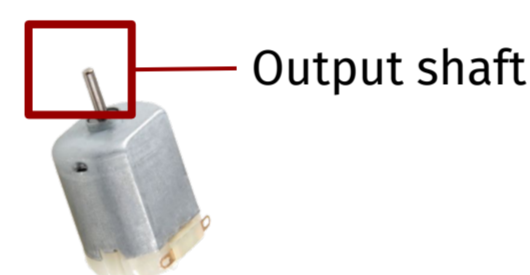


2



Attach the motor to the battery pack. Then attach it to the body of your scribble bot.

3

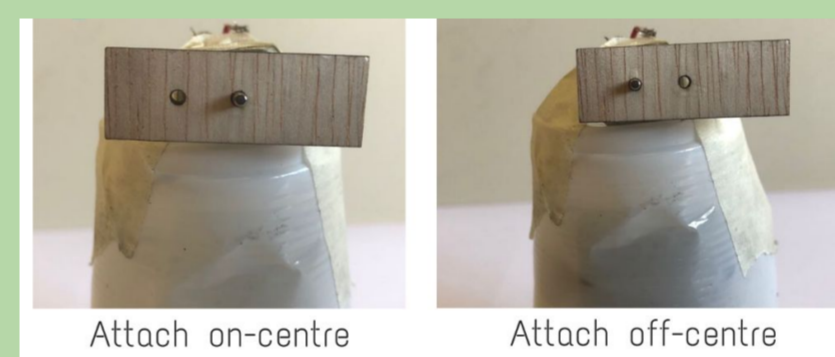


How do you make your scribble bot spin, jitter, wiggle or vibrate? (Hint: You can attach a weight to the motor's output shaft)

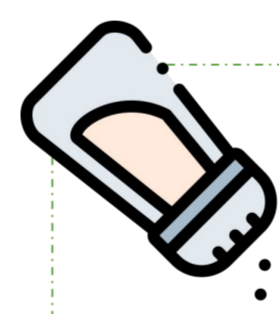
4



Attach Scribble's legs to his body using tapes



What do you observe about Scribble's movement when the offset weight item is attached to different points on the output shaft?



DASH OF DESIGN: Iteration is one of the key components in design thinking. Watch the video to learn more:



SHARE



Share & Reflect!

Share your bot with us and participate in one of these scribble challenges:

Circle Challenge: Which group can draw the most circles or spirals?

Most Artistic Bot Challenge: Can you make a bot that will draw repeating patterns or eye-changing, artistic drawing?