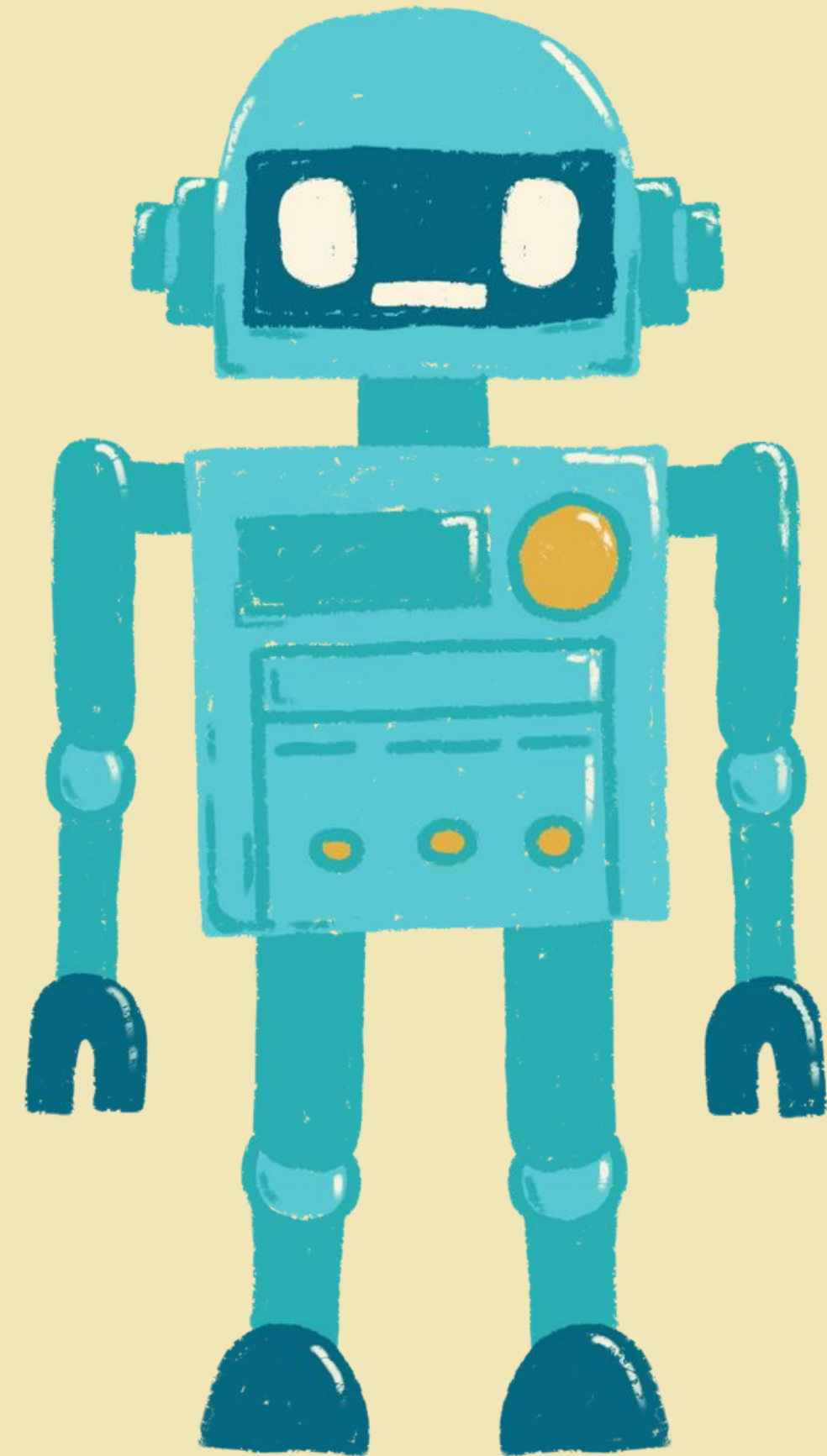


Artbot: Robotics lesson

Lesson

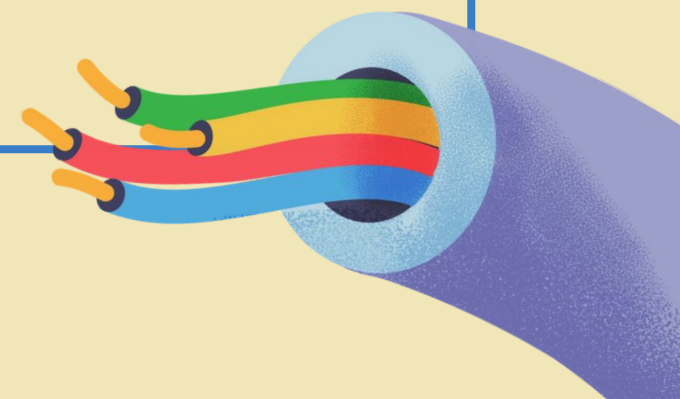
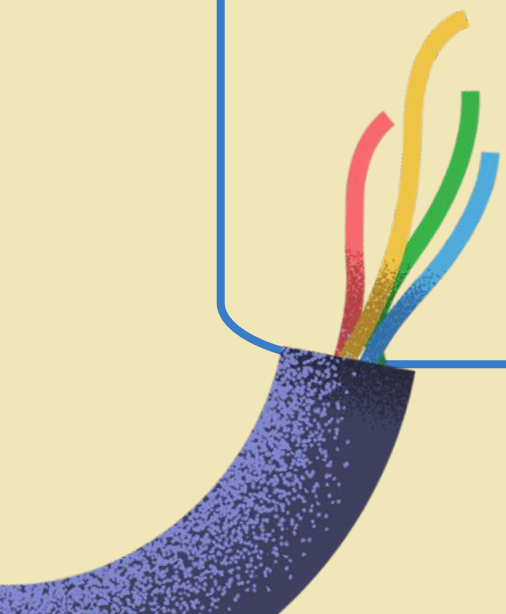


Lets introduce ourselves!

My name is Saanvi Shah and I will be guiding you today!

Your turn:

My name is [...] and my favorite color is [...]



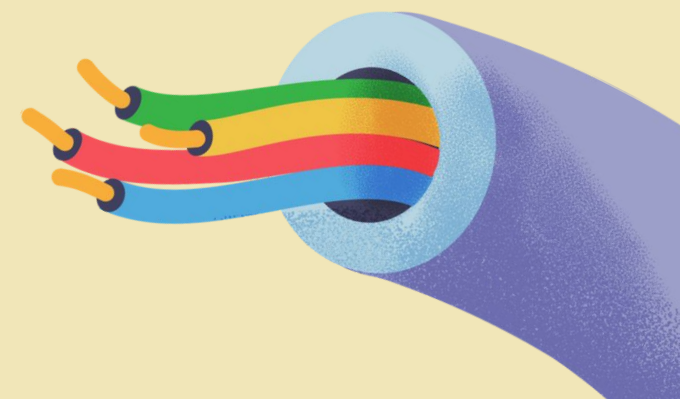
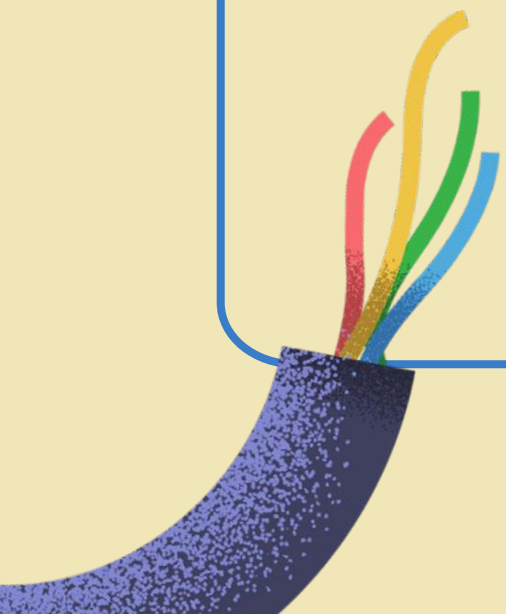
What is a robot?

**Robot: a machine that
can perform tasks
automatically**

What task do you think the ARTbot
does? HINT: it's in the name!



https://www.youtube.com/watch?v=hhM2Ro6drxw&ab_channel=SharpWind

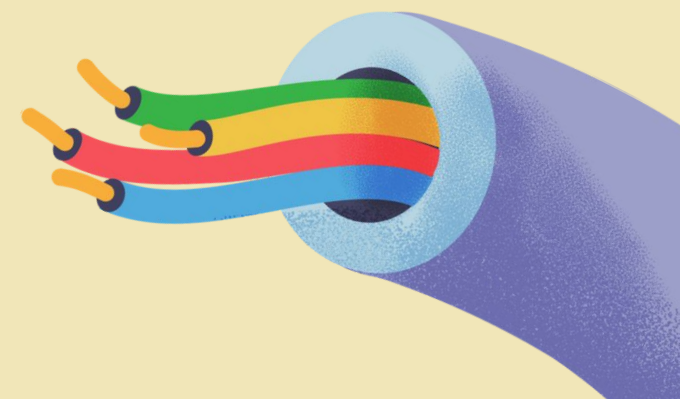


We are going to be making...

The Artbot!

What are some of the materials you see?

-





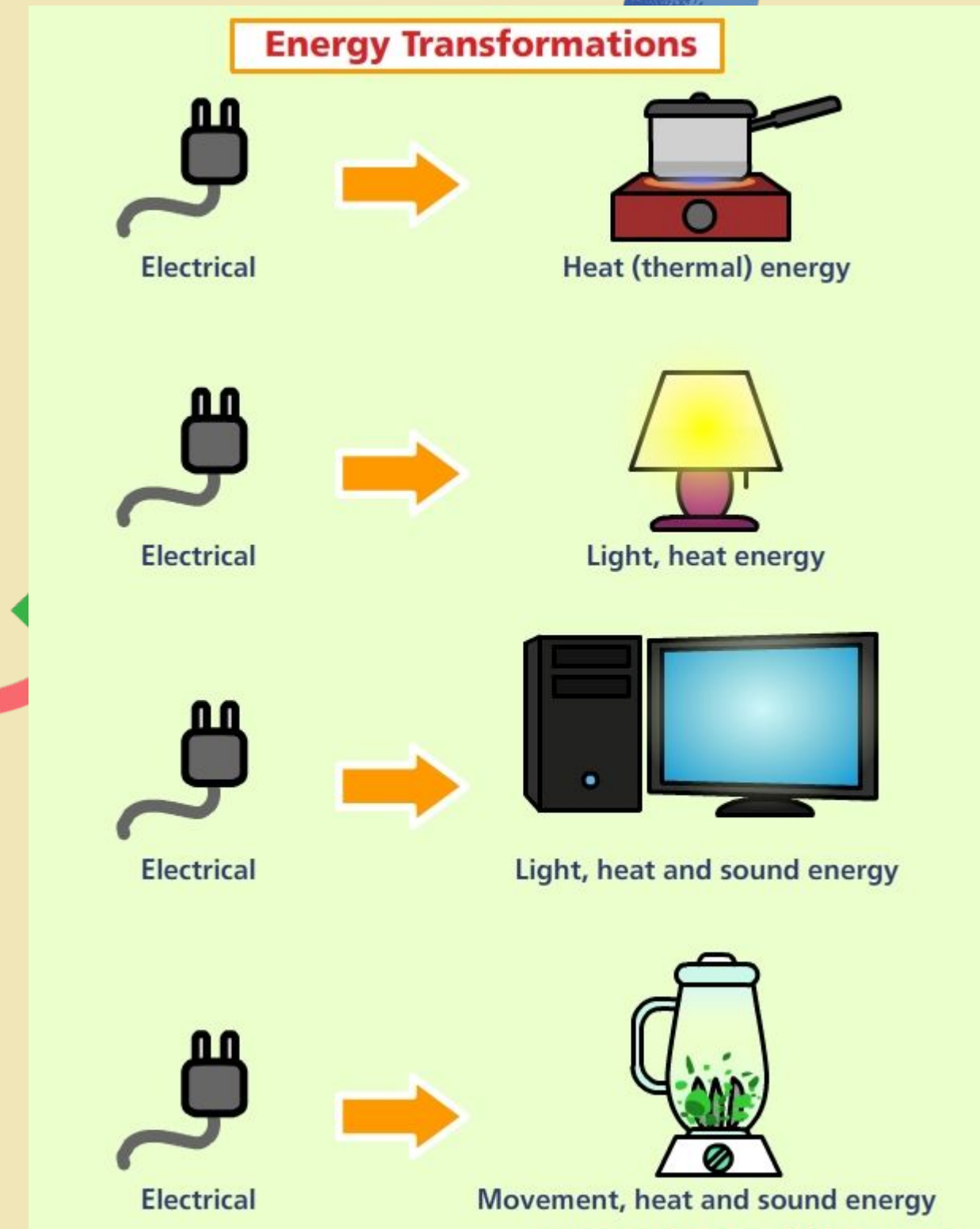
How does this all work?

This works due to: electricity

What is energy: is the ability to do work or cause change. It helps us move, heat things up, or make things happen.

Electricity: is a form of energy that we use to power things like lights, TVs, and computers.

What household materials can you think of that is powered by electricity?





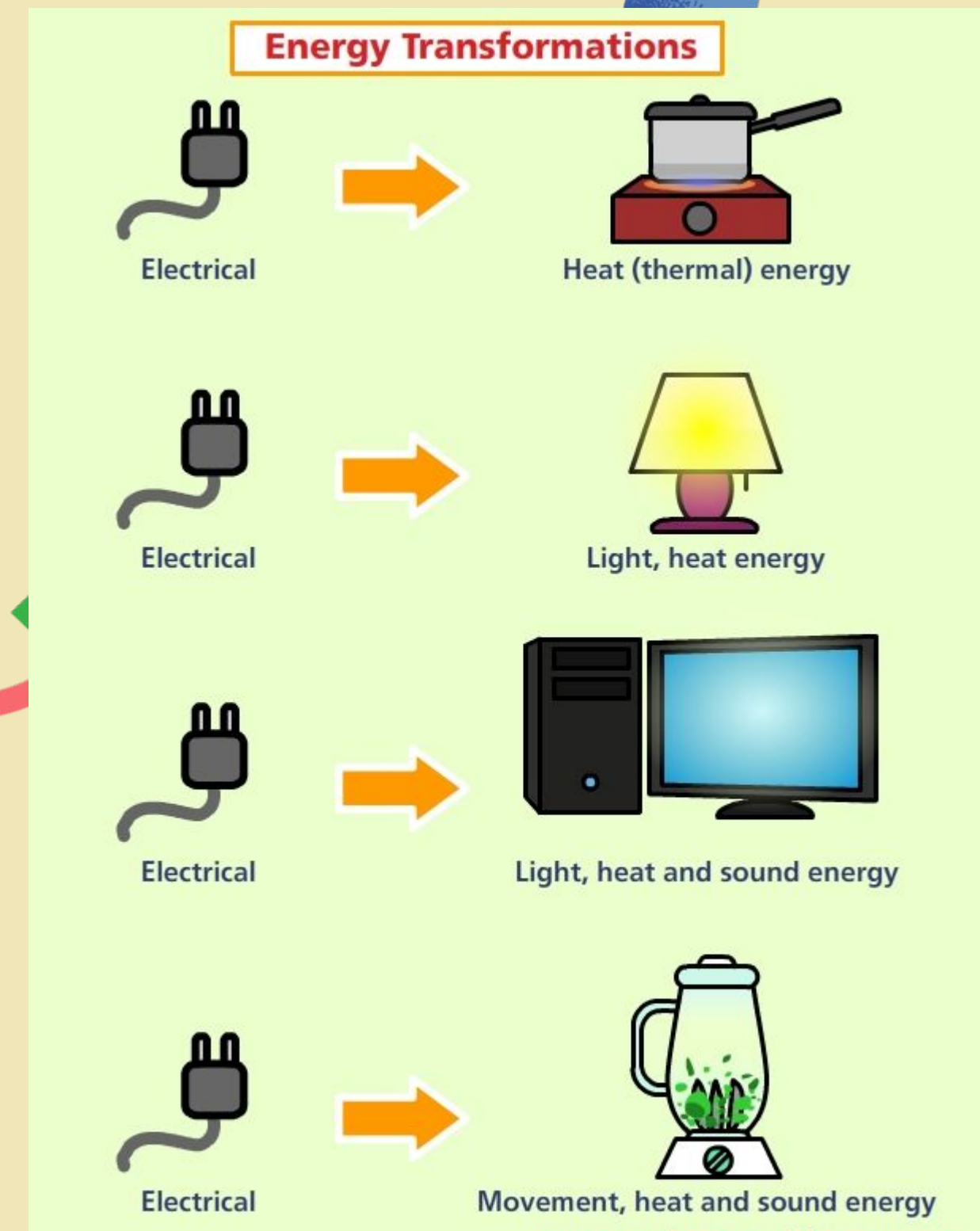
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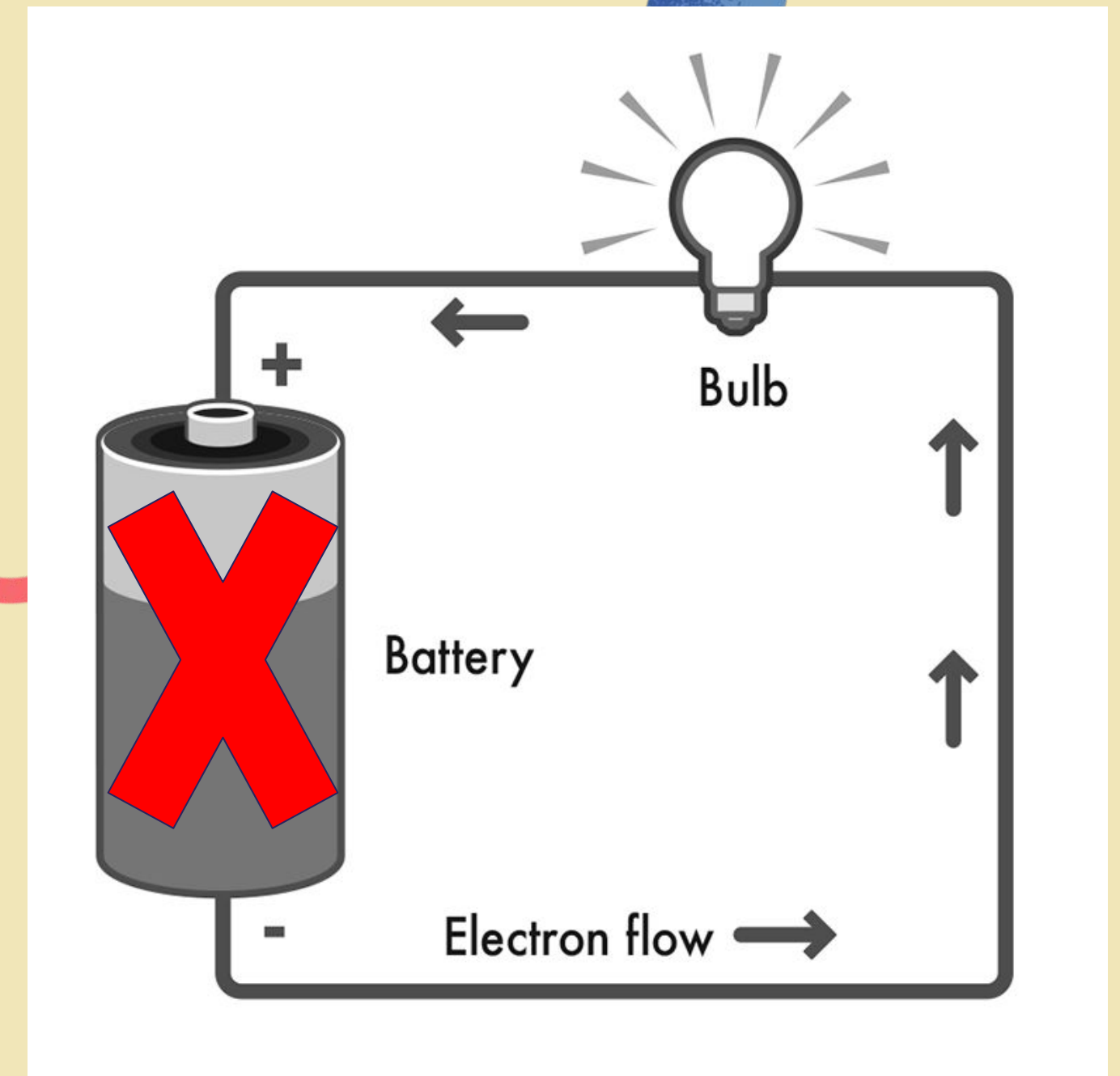


How does electricity flow?

Similarly: electricity travels through a wire to a bulb

Batteries: Some things, like toys and flashlights, use batteries. The battery is like a small power station that gives them electricity.

Quiz: What would happen if we remove the battery from the circuit?





How does the artbot work?

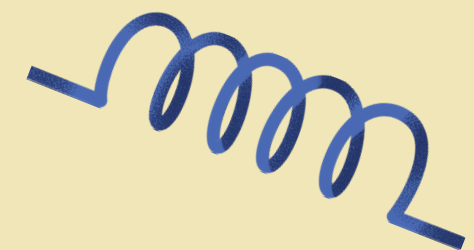
Battery: The battery pack supplies electricity to the motor through the wires, starting the rotation.

Motor Spins Glue Stick: The motor rotates the wheel, creating vibrations.

Vibrations: move the cup and the markers, making dot art

https://www.youtube.com/watch?v=daWU2Oh_xlg&t=1s&ab_channel=ScienceBuddies

Watch the video above for a live visual! Skip to 1:58

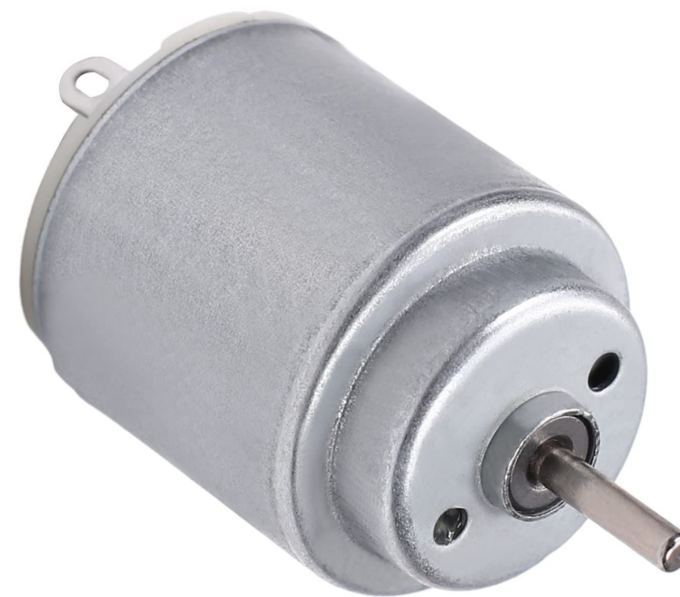


Let's Build Together!



First Step:

Grab a cup!



Second

Place the motor on
Step: top!



Third Step:

Place the battery
pack on top!

Let's Build Together!



Fourth Step:
Pick three of your
favorite colors!

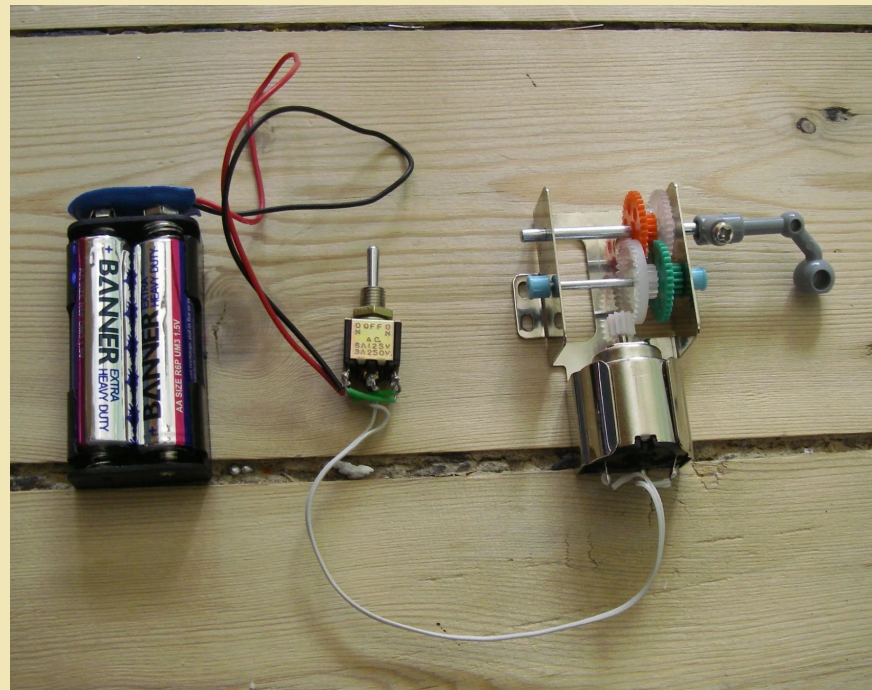


Fifth Step:
With a black
sharpie, mark
where on the cup to
take the markers!



Sixth Step:
Tape the markers
where the dots are!

Let's Build Together!



Seventh Step:
Connect wires to
battery to turn on
motor



Eight Step:
Place the bot on
white paper and
see the art!