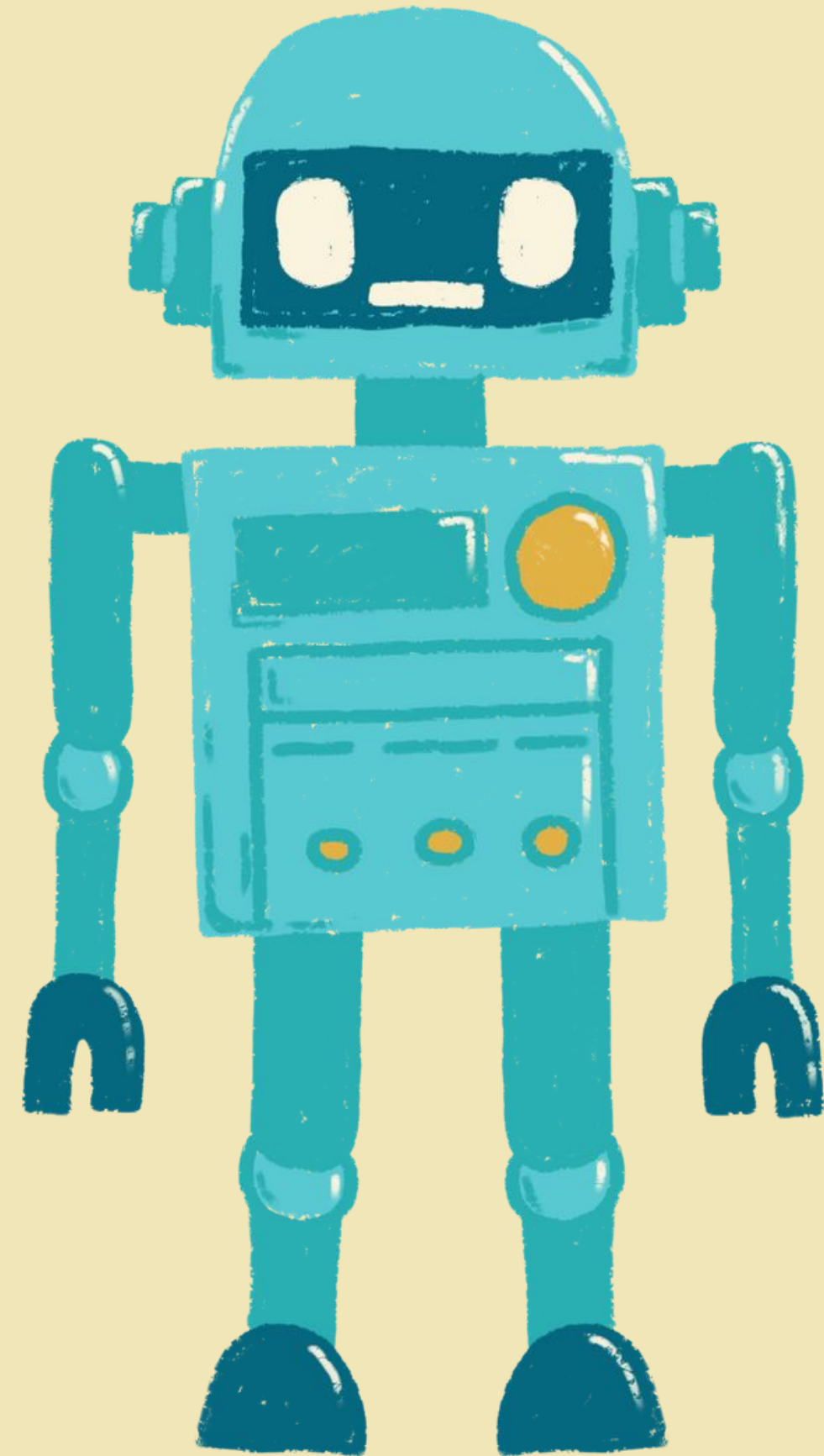


Bristle bot: Robotics lesson

Lesson

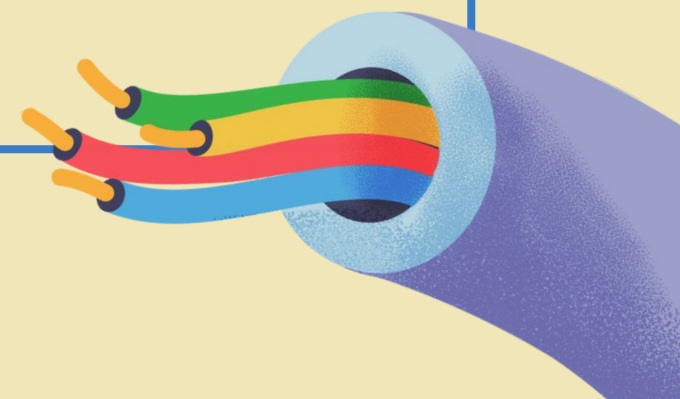
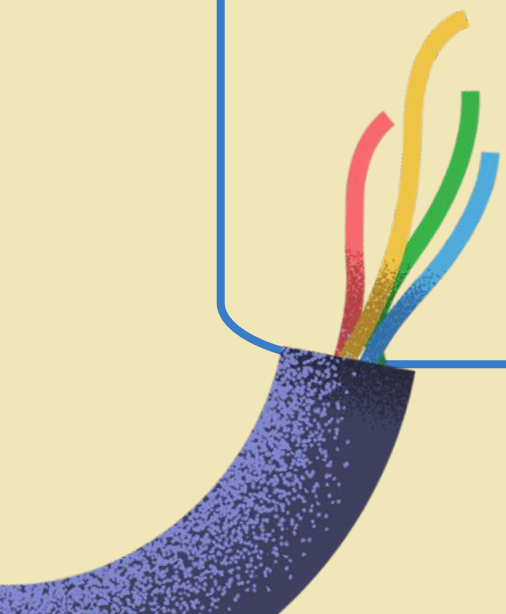


Let's introduce ourselves!

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

Your turn:

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



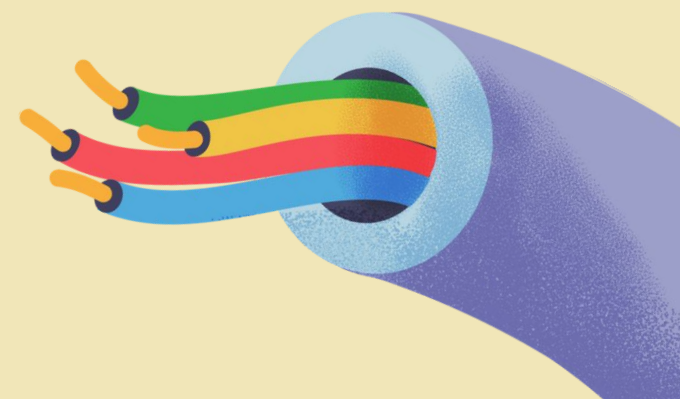
What is a robot?

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

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



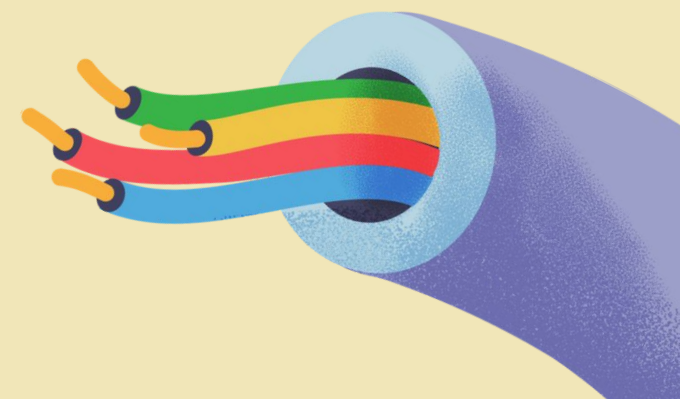
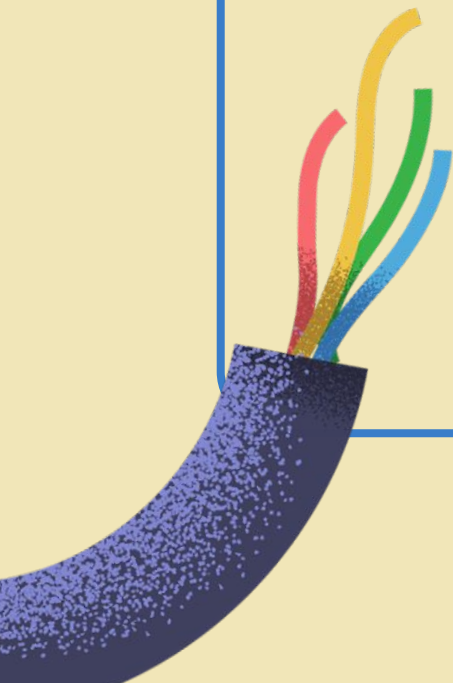
https://www.youtube.com/watch?v=hhM2Ro6drxw&ab_channel=SharpWind



We are going to be making...

The Bristlebot!

Let's point out the materials!





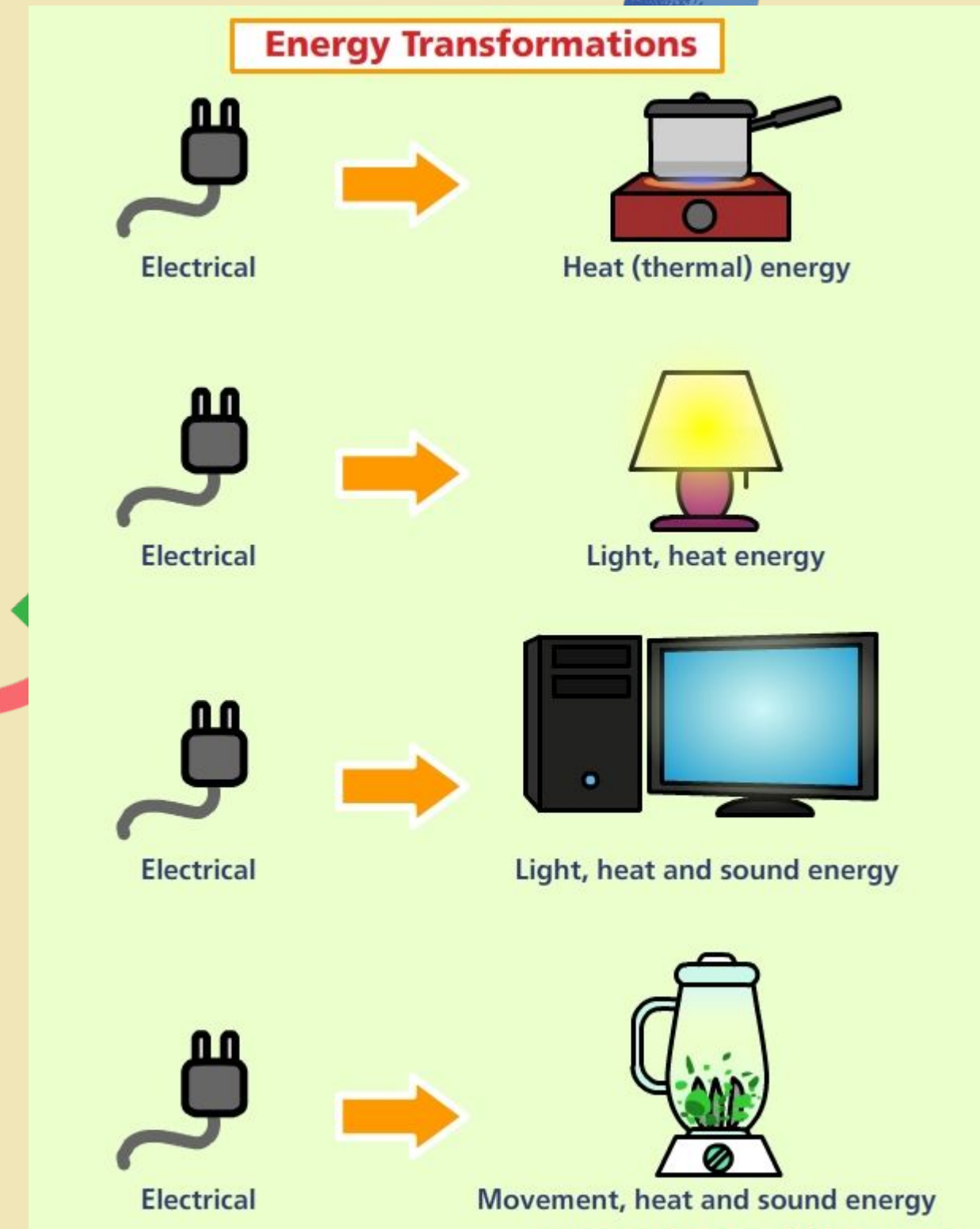
How does this all work?

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?



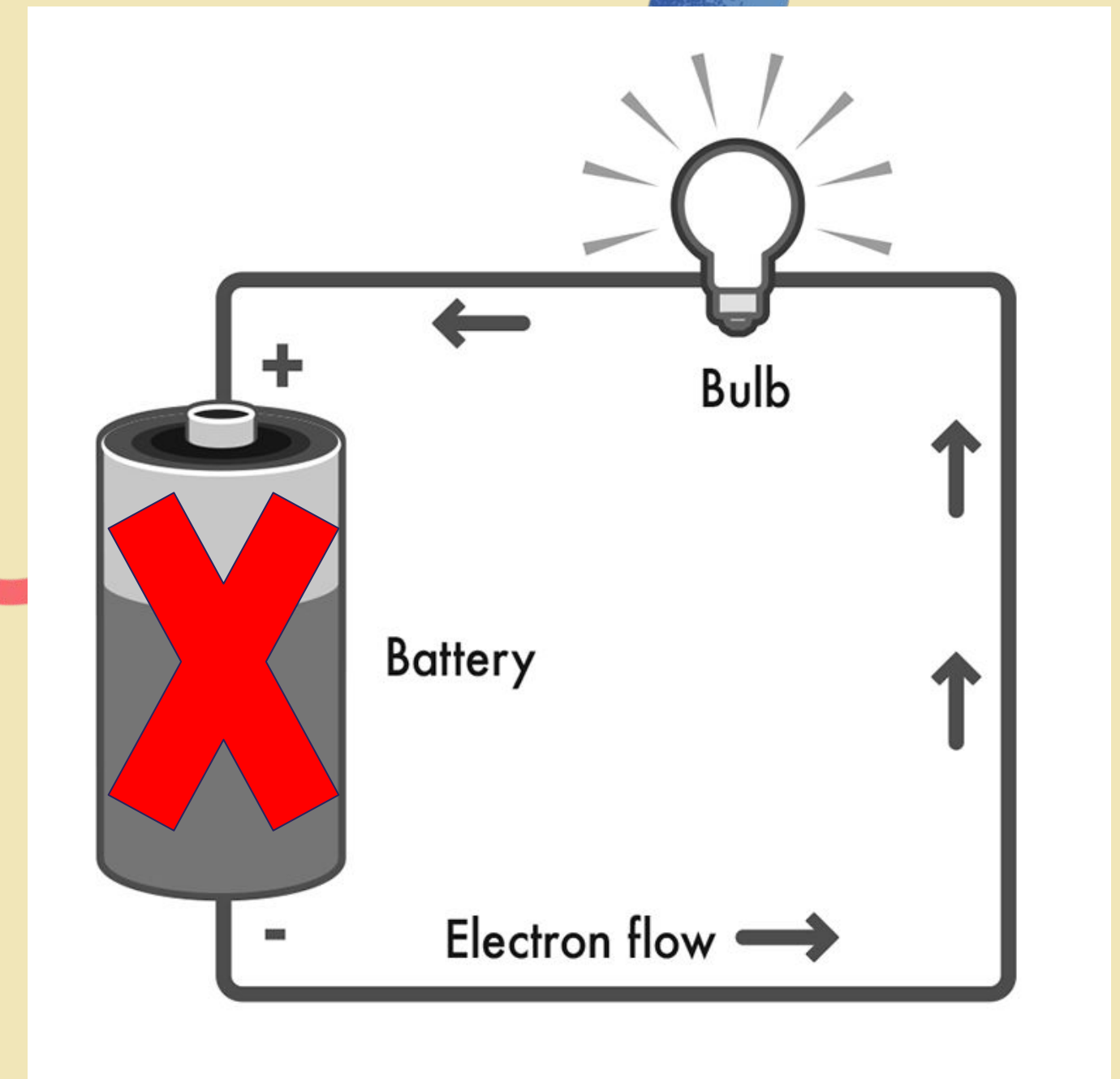


How does electricity flow?

Flowing Water: Imagine electricity like water flowing through a pipe. The water represents the electricity, and the pipe is like the wires that carry it to our homes.

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.





How does the Bristlebot work?

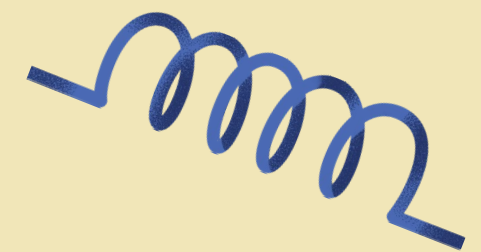
Battery: The battery pack supplies electricity to the motor through the wires, starting the rotation.

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

Vibrations: move the brush

https://www.youtube.com/watch?v=Q1zToREgVoc&ab_channel=ScienceBuddies

Watch the video above for a live visual! Skip to 4:37



Let's Build Together!



First Step:

Grab a brush!



Second

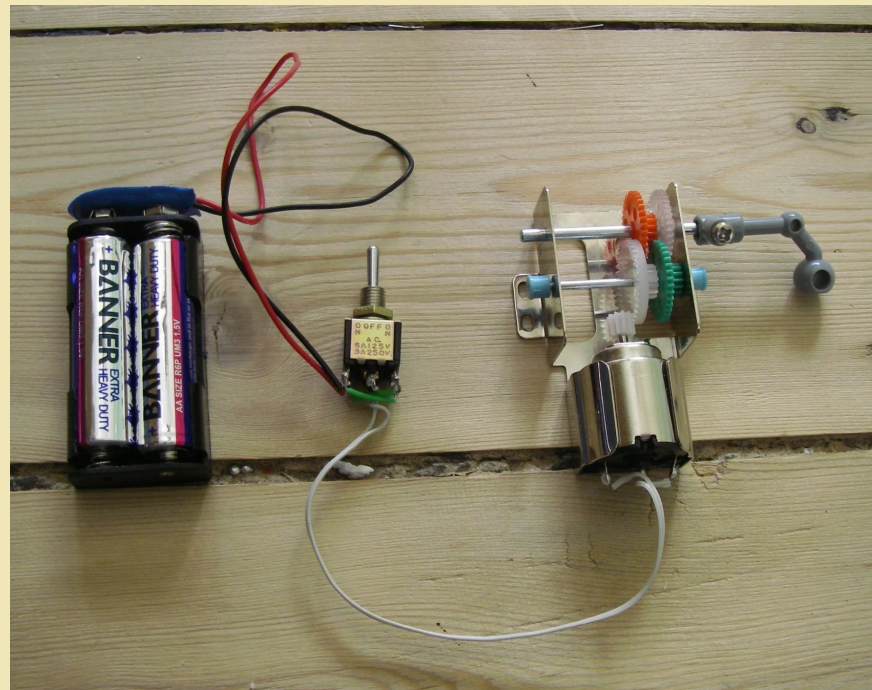
Place the motor on
Step: top!



Third Step:

Place the battery
pack on top!

Let's Build Together!



Fourth Step:
Connect wires to
battery to turn on
motor



Fifth Step:
Place the bot on the
table and play with
it!