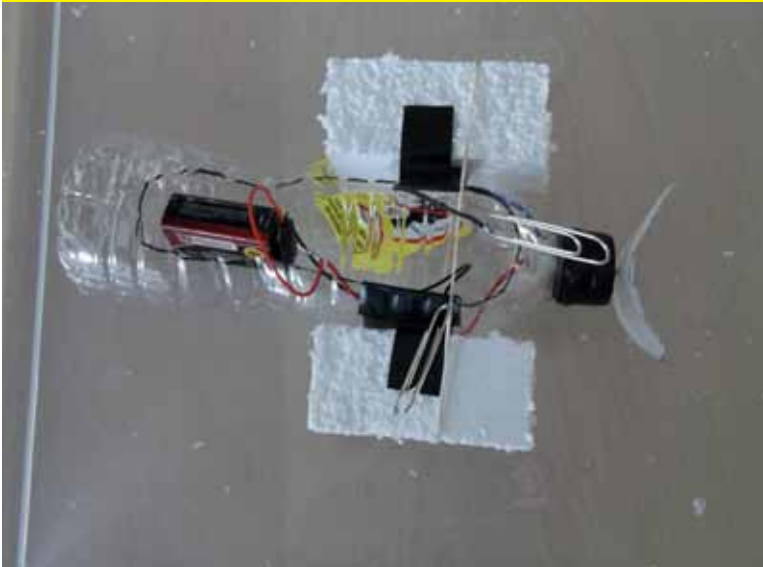


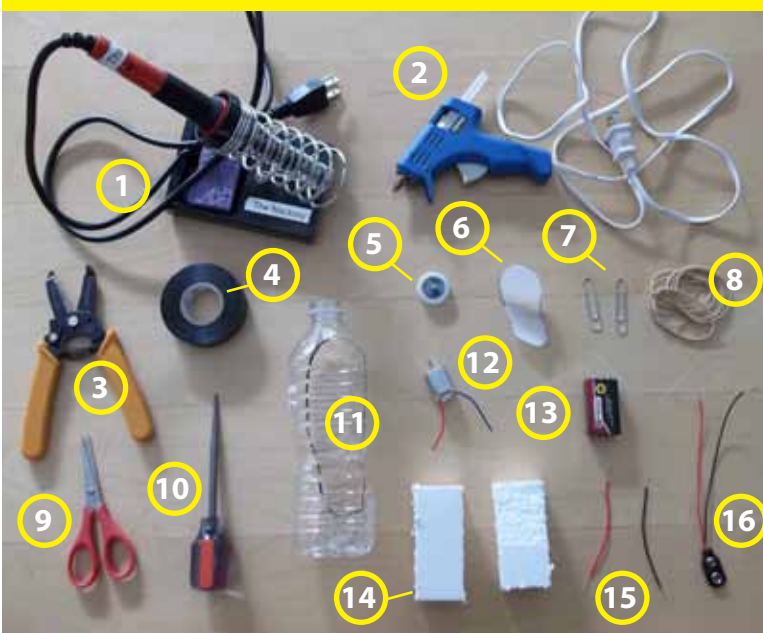
WORKSHOP on **Basic Electronics**

Project: Build a **BOAT**

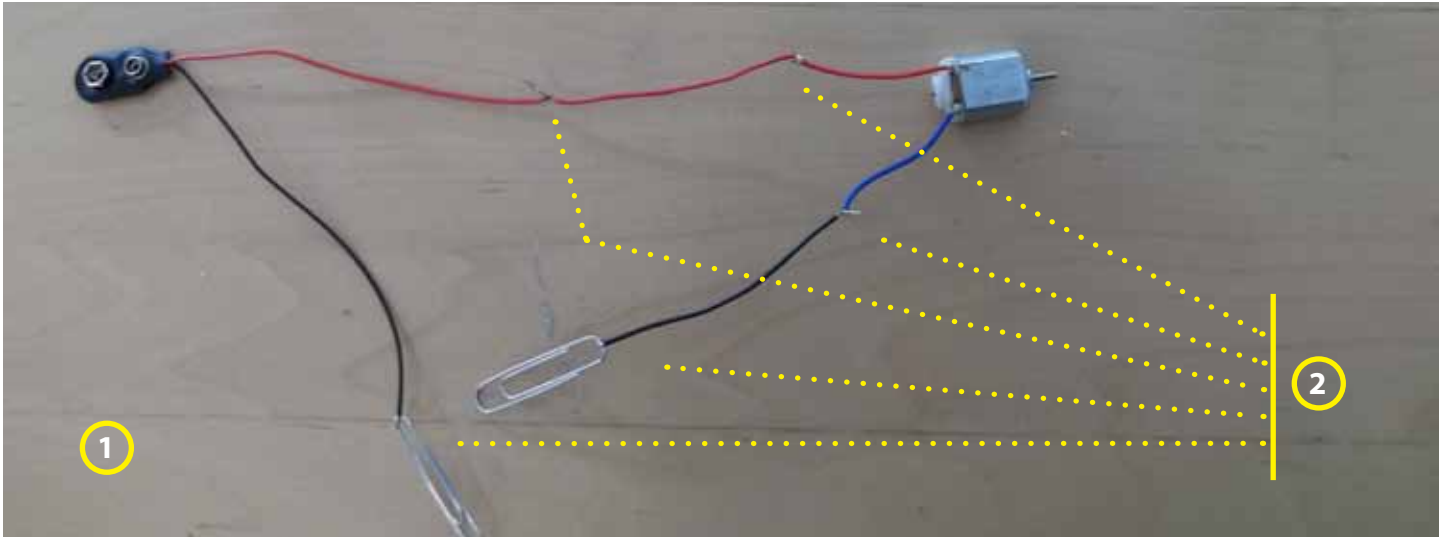


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Parts (Materials and Tools):



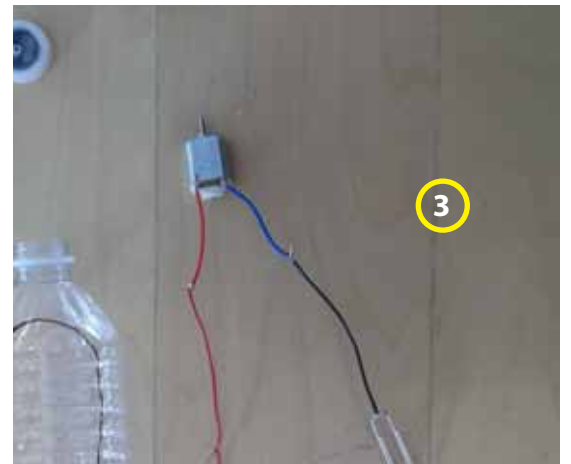
How to put this together...



1. Make an electrical circuit with a motor. You will need two extra wires, two paperclips (for switch) and a battery holder.

2. Attach each connection. IMPORTANT all red wires are connected together. The extra black wire connects to the blue. Then each paperclip to the black ones.

3. Attach the battery and test if the motor is working! -- If it is not, check for what is wrong and fix it! :-)

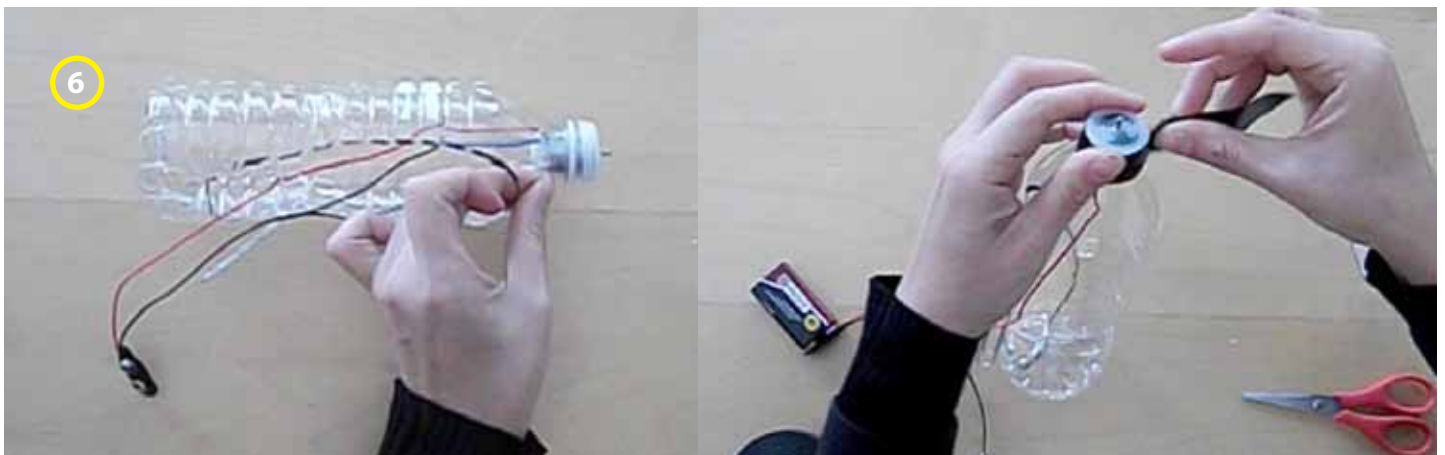


Cut an opening in your plastic bottle.

How to put this together...

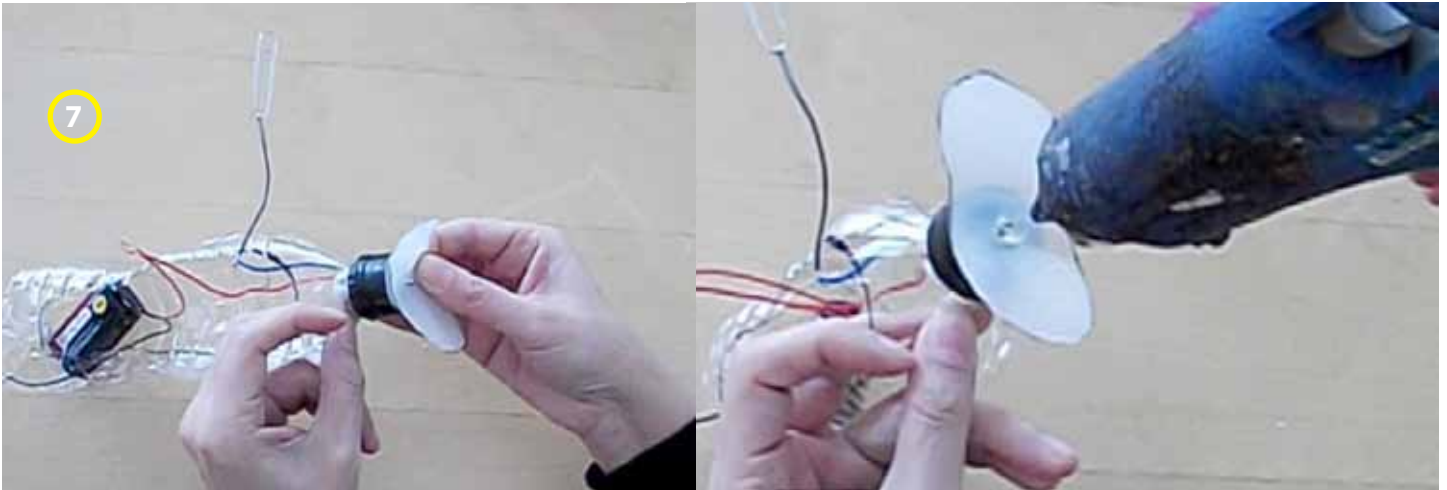


Using a little bit of hot glue attach the motor to the cap. **WARNING: Don't cover the little hole.**

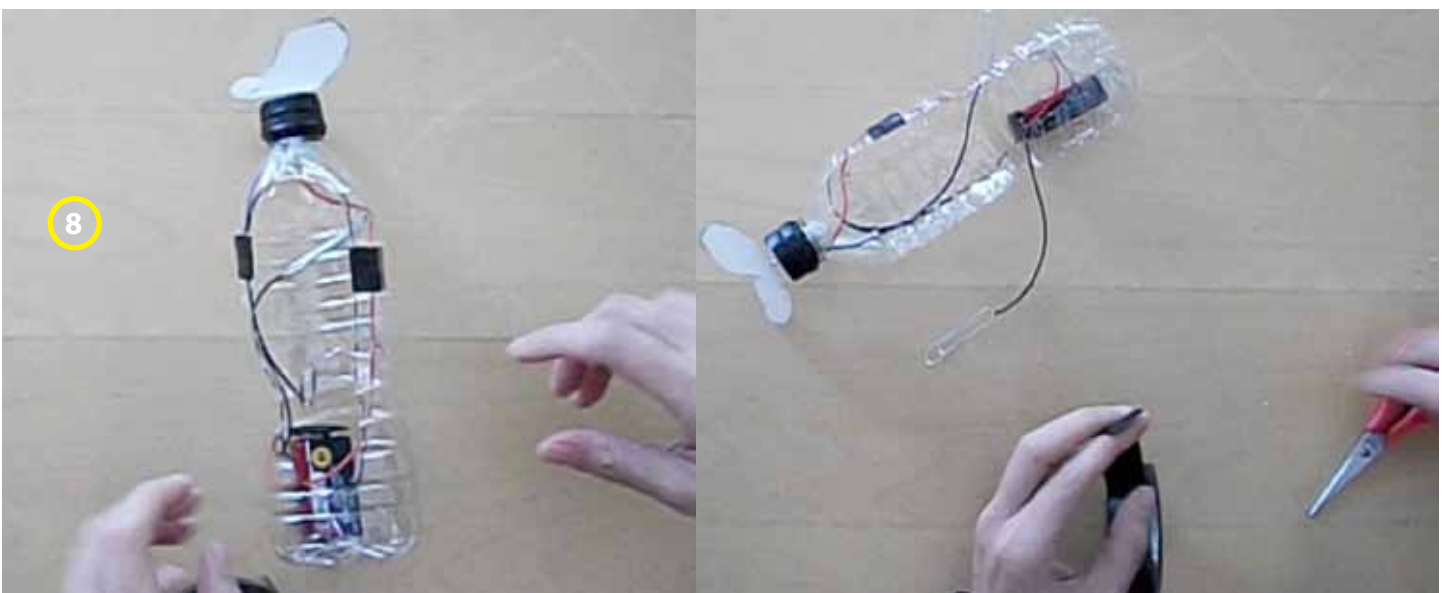


Insert the circuit through the opening of the bottle and attach the cap with electrical tape.

How to put this together...

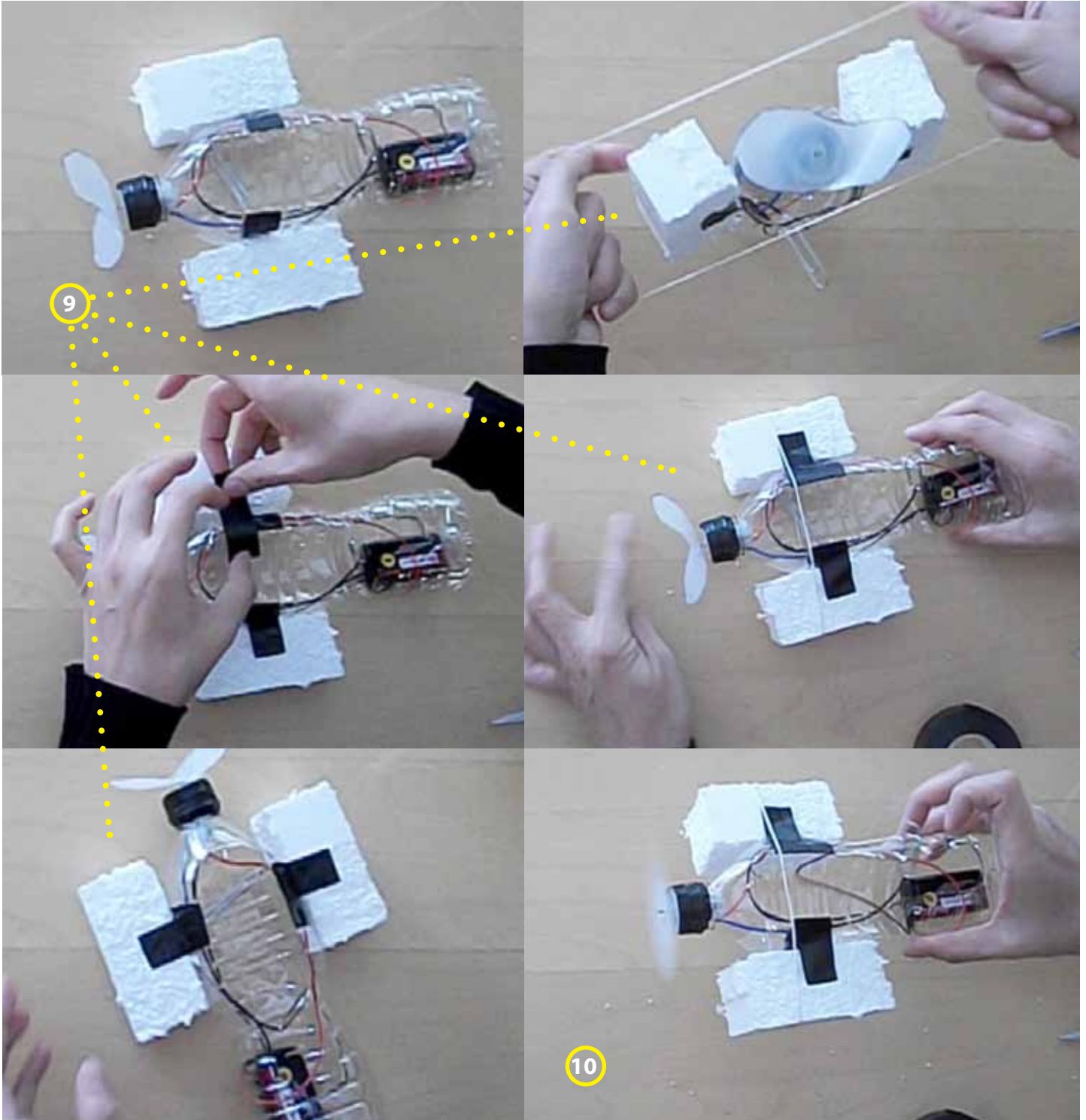


Attach propellor to the motor with a good amount of hot glue. AND LET IT DRY/COOL OFF!!!!!!



In the inside of the bottle organize the wires, switch and battery. Using electrical tape, attach wires.

How to put this together...



9. Attach a Styrofoam block on each side of your boat. Use electrical tape and a rubber band.

10. TEST YOUR BOAT!!!!!!!

What did you learn from doing this project?

CIRCLE THE CONCEPTS WE ARE USING IN THIS BOAT....

LIGHT BULBS

SWITCH

CIRCUIT

WIRES

CONDUCTIVITY

ELECTRICITY

PARALLEL CIRCUIT

ELECTRONS

BATTERIES

SERIAL CIRCUIT

POSITIVE

ELECTROMAGNETISM

POLES

NEGATIVE

MAGNETS

MOTOR