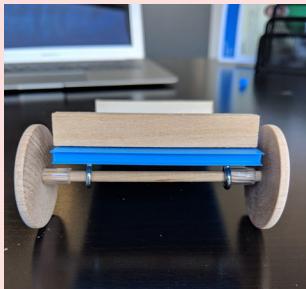


# HOW TO BUILD A SOLAR CAR



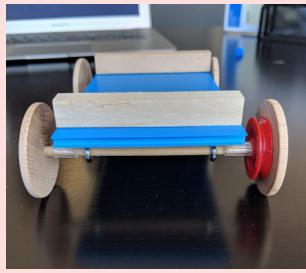
## STEP 1: Build your base!

Take the push pin to mark holes in the coroplast board for where the screw eyes will go. Twist the screw eyes through the coroplast board and into the wood blocks as straight as possible. *Mount them about 1-2 cm from the edges of the coroplast, and make sure the screw eyes are equally distanced.*



## STEP 2: Place your axles!

The shorter dowel acts as the front axle, while the longer dowel acts as the back axle. Cut rubber tubing into 4 equal pieces (each piece should be about 0.5cm long). Place the wooden dowels through the screw eye holes. Add rubber tubing pieces at the ends of the axles outside of the four screw eyes.

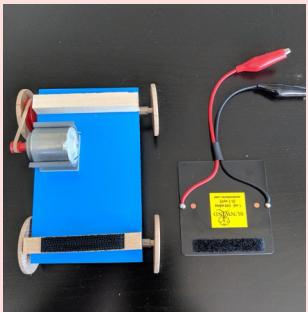


## STEP 3: Add Wheels!

Slide the large red pulley wheel on one end of the back axle, then add wooden wheels to the ends of each axle.

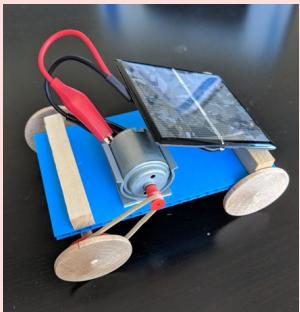
*\*Hint: you may need to slightly sand the dowel down a bit to put the pulleys on. Do not force it too hard or the dowel may break!*

## STEP 4: Add motor!



Attach the small red pulley to the pointy end (shaft) of the motor. Place the motor in the mounting clip and then position it on the top of the coroplast base so that the small and large pulleys are in line with each other. Attach elastic band around both the small and large pulley and test positions to ensure there is tension in the elastic. When positioned correctly, remove the paper on the sticky back on the mounting clip and stick it to the frame.

## STEP 5: Completing the circuit!



Attach the solar panel using velcro strips. Attach alligator clips to the motor. The car will move forwards or backwards depending on the orientation of the clip colours.

## STEP 6: Find some sun and race your car!

### EXTENSION:

Try replacing the solar panel with the battery connector. What do you notice?



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