Wheel of fortune



duration: 30 - 60 minutes age: from 7 years

Make a bettery powered wheel of fortune

undefined

tools

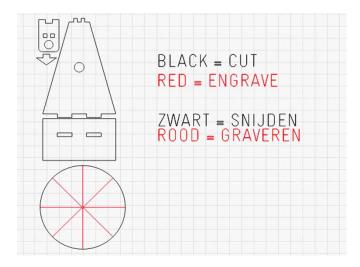
Laser cutter
Soldering iron
Wire cutters
Wire strippers
colored markers
small file
glue gun

materials

Plywood, 1/8" (3mm) thick
woodglue
soldering wire
AA or AAA battery holder
Battery
DC motor (reclaimed from an old cd player or similar)

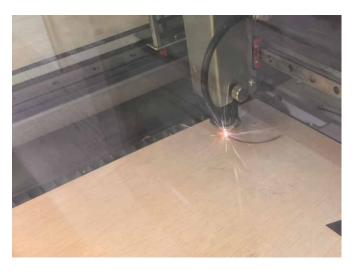
glue sticks for the glue gun
Amall momentary push button

 $\hfill \square$ electrical wire



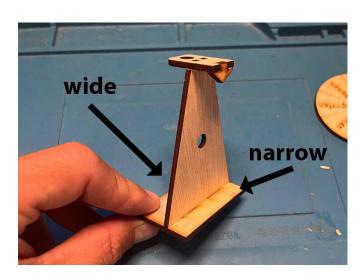
Edit the design

- Open the template in your laser-cutter software. (I use Lightburn)
- Edit the hole in the disk to snugly fit the shaft of your dc motor.
- Remove lines until you have the number of facets you want.
- Add text to each of the facets.



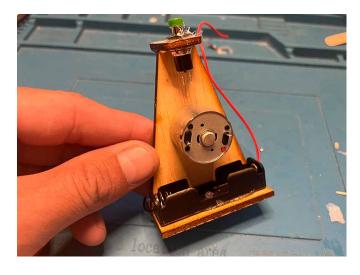
2 Cut your design

• Use the laser cutter to cut out your design.



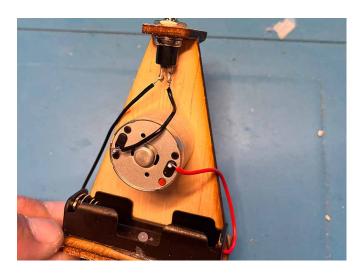
3 Assemble the base

- If pieces dont fot properly, use a file to make them fit
- Use some glue to put the base together. Make sure to have the arrow on the narrow side of the base.



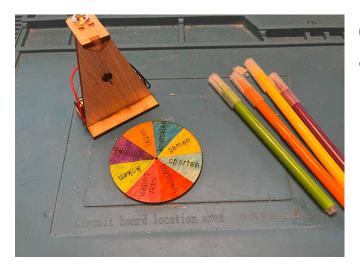
Attach the motor, battery and button

- The motor should be on the wider side of the base.
- Use the glue gun to glue the motor to the base.
 Make sure not tp glue the axle.
- Use the glue gun to glue the motor battery holder to the base. (on the same side as the motor)
- Fit the button trough the hole in the top and screw it tight.



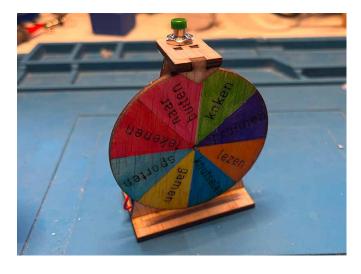
5 Soldering

- Solder the red wire from the battery holder to one terminal on the motor.
- Solder the black wire from the battery holder to one terminal on the button.
- Solder a wire between the remaining terminals on the motor and the button.



Color your wheel

Use the markers to give the wheel a bit of colour.



Attach the wheel

 Push the wheel onto the shaft. Mke sure you dont damage the arrow on the top

8 You're done!

Test your fully electric wheel of fortune!