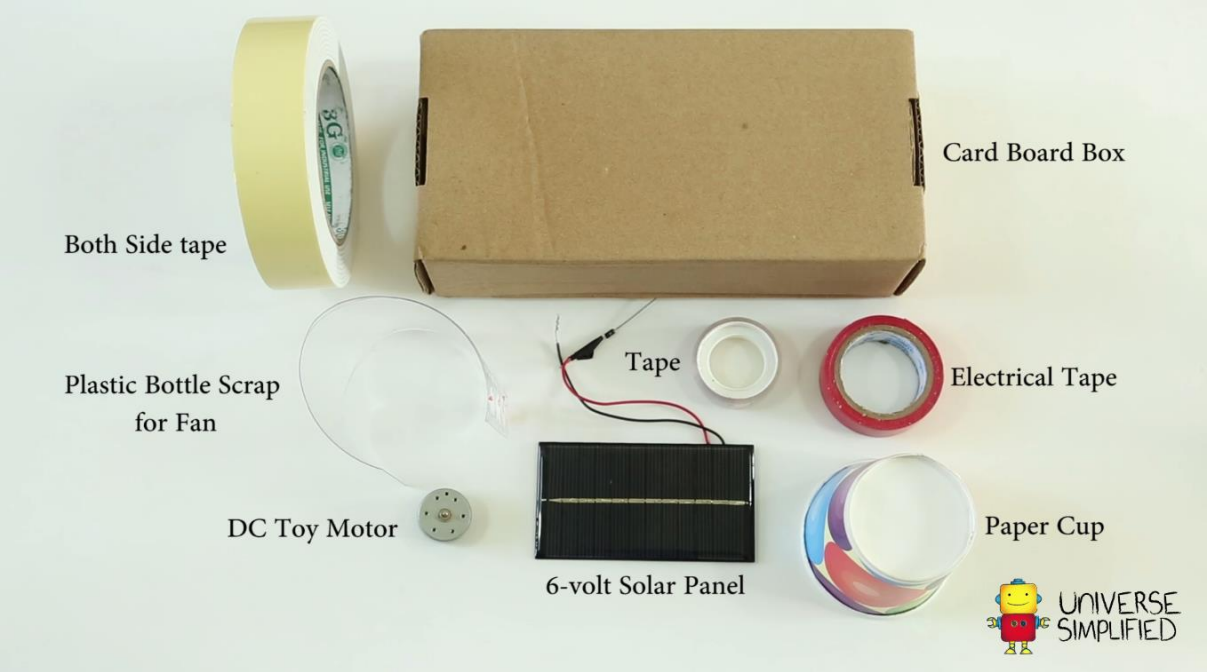
UNIVERSE SIMPLIFIED FOUNDATION

Empowering For Innovation

Solar Fan

How to Make it



Pic 1

***Step 1*:**

Pic 2

Take a PET bottle. Cut it in the center. According to the picture you need the unshaded part. You can use a cutter or scissors to cut the center.

Step 2:

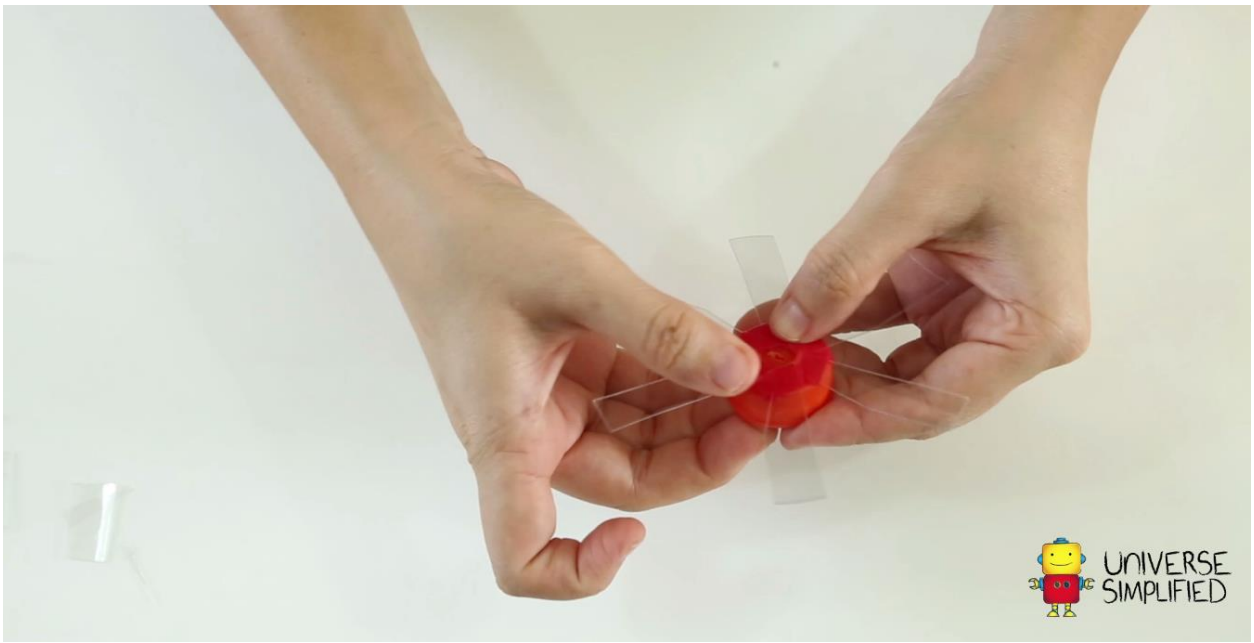
Pic 3

Pic 4

Then cut this part into thin rectangular strips as in Pic 3 and Pic 4. Make these strips equal in size. Then a few millimeters from the corner of one base make an inclined cut in each one of them (like in the picture below). These are the arms of your solar fan's propeller. Use scissors for this.

Step 3:

Pic 5



Pic 6

Take a bottle cap and make a hole at the center of it. The hole should be big enough to fit the axle of the DC toy motor tightly. You can heat the needle to make the hole in the cap or use a rounder.

Stick the strips you cut in step 2 around the hole on the cap at equal distances. You can use fevikwik or tape for this.

Check your propeller by attaching it to the motor and seeing if it fits properly. Make sure that the axle fits tightly on the propeller.

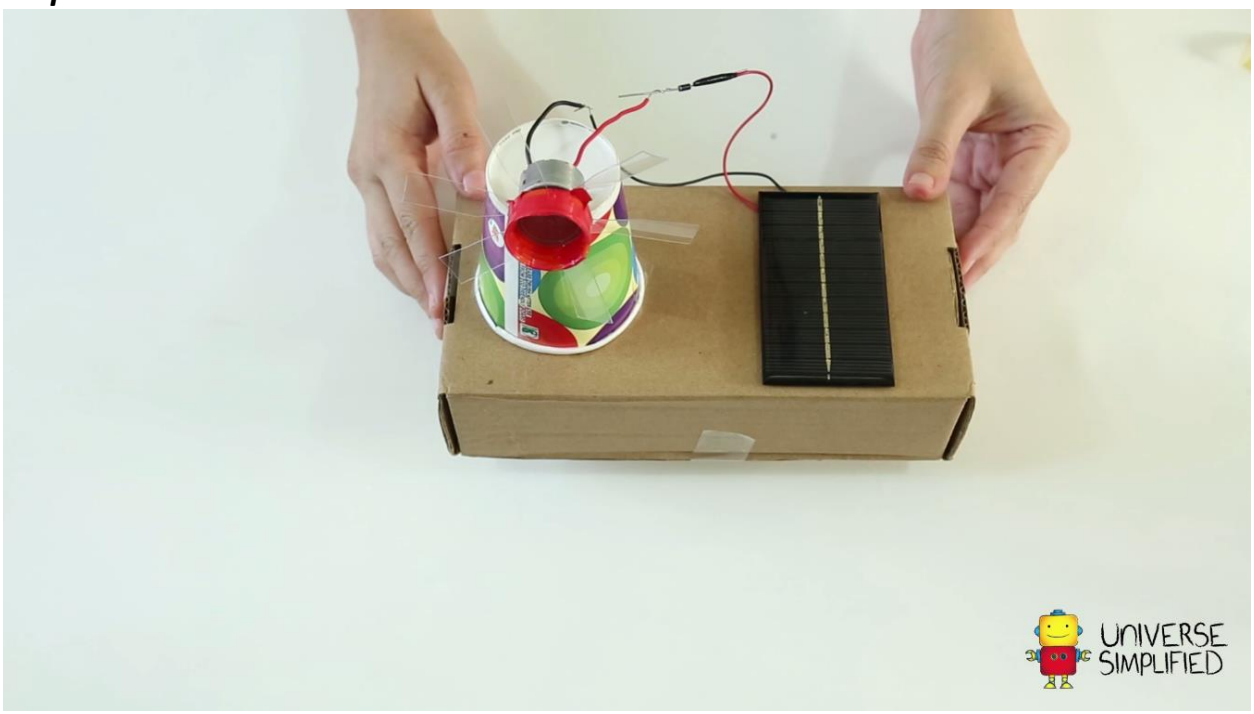
You can also use cardboard to make the propeller as in Picture.

Step 4:

Pic 7

Prepare the stand for the fan. Here we have used a cardboard box and paper cup but you can make it however you wish.

Step 5:



Pic 8

Connect the solar panel and motor. Place it in the stand you have prepared.

Connections:

1. Positive of a solar panel to the positive of diode
2. Negative of a diode to one terminal of the motor
3. Negative of a solar panel to the other terminal of the motor
4. Attach a propeller to the axle/ shaft of the motor

Below are a few more examples of solar-fan and how you can modify it if you don't have different materials.