Oscillating Fan

Riddle Time

Can you guess the answer to this riddle?

Riddle:
When there's wind, it doesn't move;
When it moves, there's wind.
Turn it on in summer,
Put it away in winter.
(Hint: a household appliance))

Answer: Electric Fan

Introduction

What kinds of fans model do you know?

Knowledge Q&A

Ceiling fan with lights

Timer fan

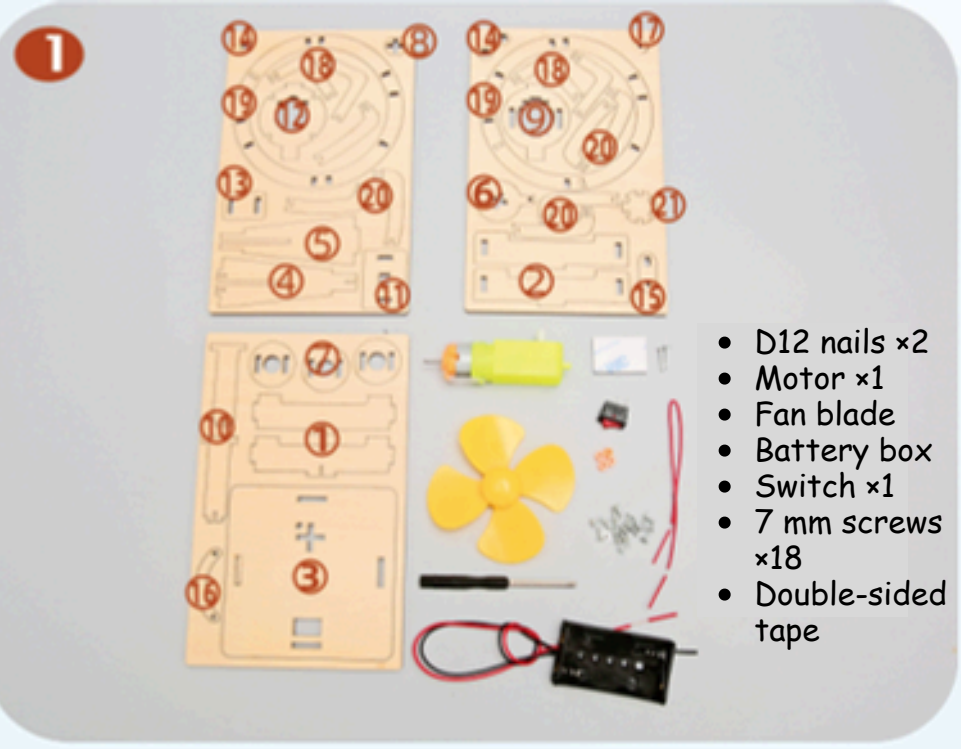
Handheld mini fan

Think About It

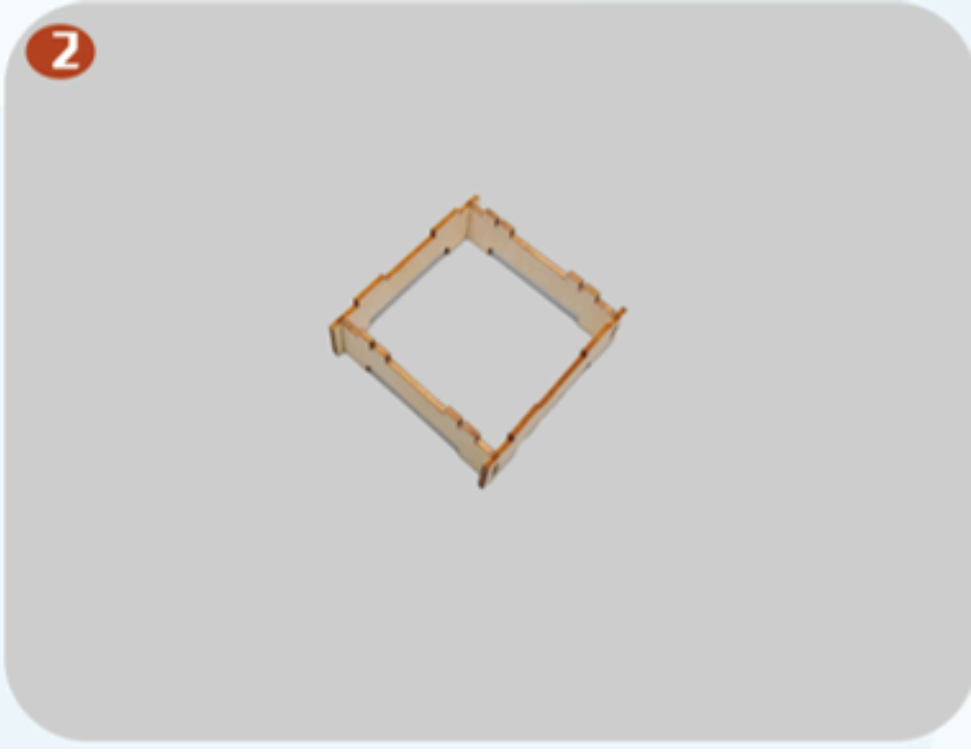
我们自己做一个摇头风扇吧

Experiment

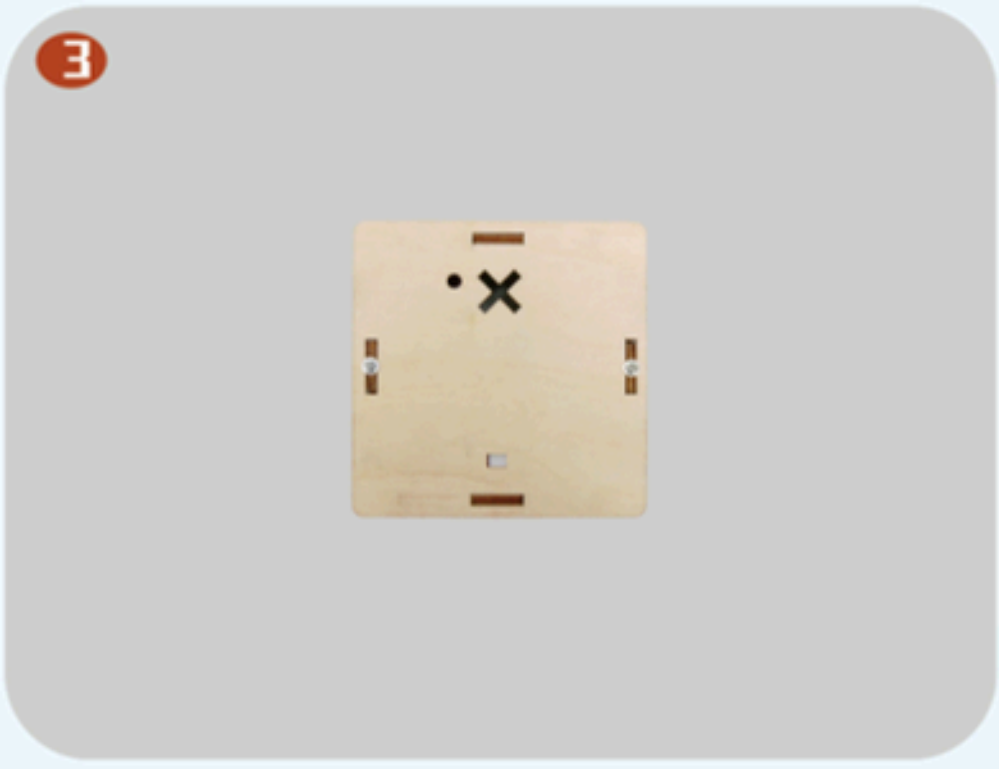
Check your components carefully!



Identify the materials



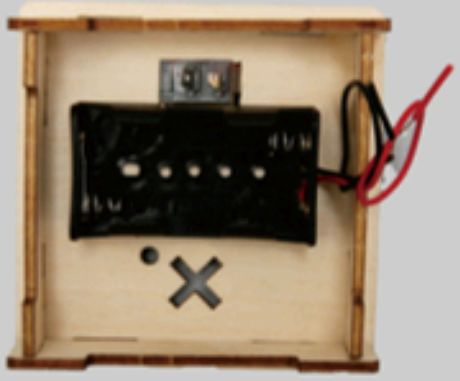
Connect two board No.1 and two board No.2 as shown



Place the assembled part into the slot of board No.3
(Note: Fix with 7mm screws)

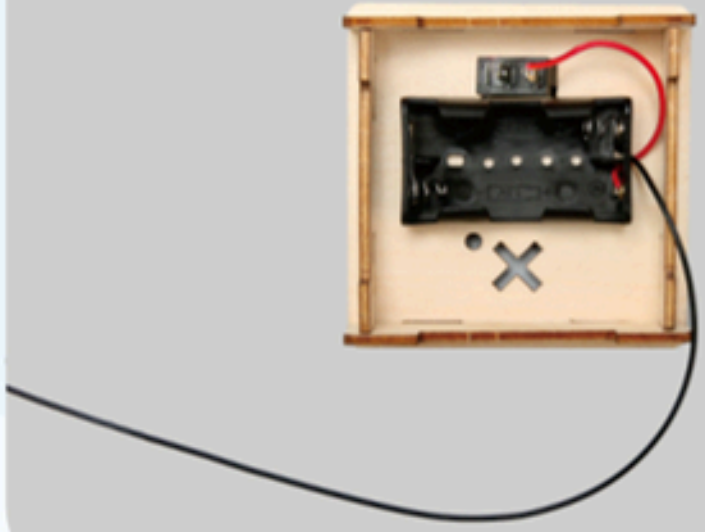
Install the power switch on board No.3

5



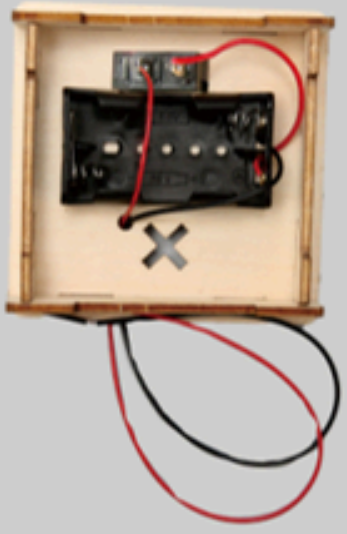
Turn the wooden board over and place the battery holder as shown
(Note: Fix with double-sided tape)

6



Connect the red wire from the battery holder to the power switch

7

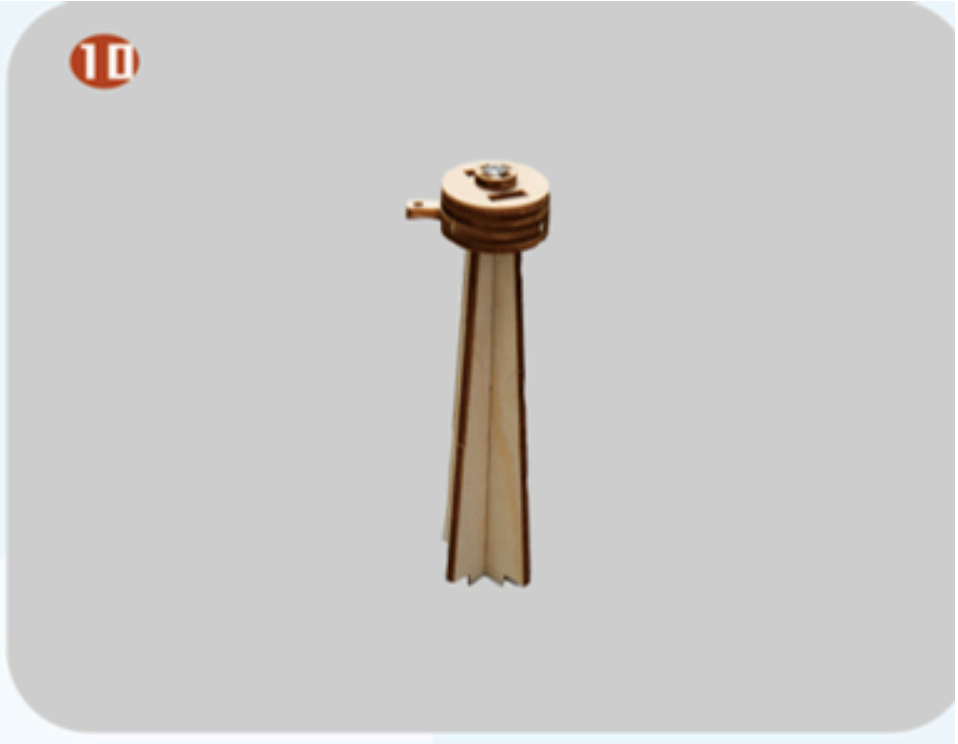


Use the red spare wire to connect the other end of the power switch
(Note: Lead the black wire from the battery holder through the wire hole)

8

Assemble parts No.4 and No.5 together

First assemble board No.6, then insert three No.7 parts one by one into the assembled part



Fix part No.8 on the base and secure it with screws

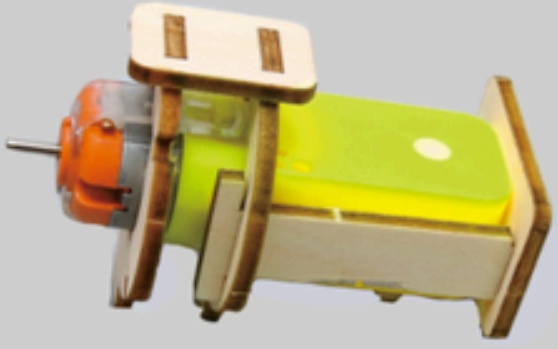
11

Insert part No.9 through the motor and connect it with two No.10 parts and part No.11

12

Attach part No.12 to the front of the motor

13



Fix part No.13 onto parts No.9 and No.12

14

Connect the assembled part to the base from step 8

15

16

First, connect the two No. 14 round-hole boards and the No. 15 board to the motor's base shaft, and use the connecting rod to link No. 16 and No. 17.
Note: Do not tighten the shaft too much.

Connect No. 16 and No. 17 to board No. 6, and attach the lead wire to the motor.
Note: Use 7 mm screws to secure the bottom part of the base.

Insert board No.18 into slot No.12 and attach the fan blades to the front of the motor

Connect board No.18 with two No.19 parts
(Note: Fix with 7mm screws in the slots)

19

Insert six No.20 boards into board No.21

20

Connect step 18's assembly to complete the fan
(Note: Fix with 7mm screws in the slots)

Science Knowledge

Working Principle of an Electric Fan

The electric fan works by using the force on a coil of wire in a magnetic field to rotate, converting electrical energy into mechanical energy.

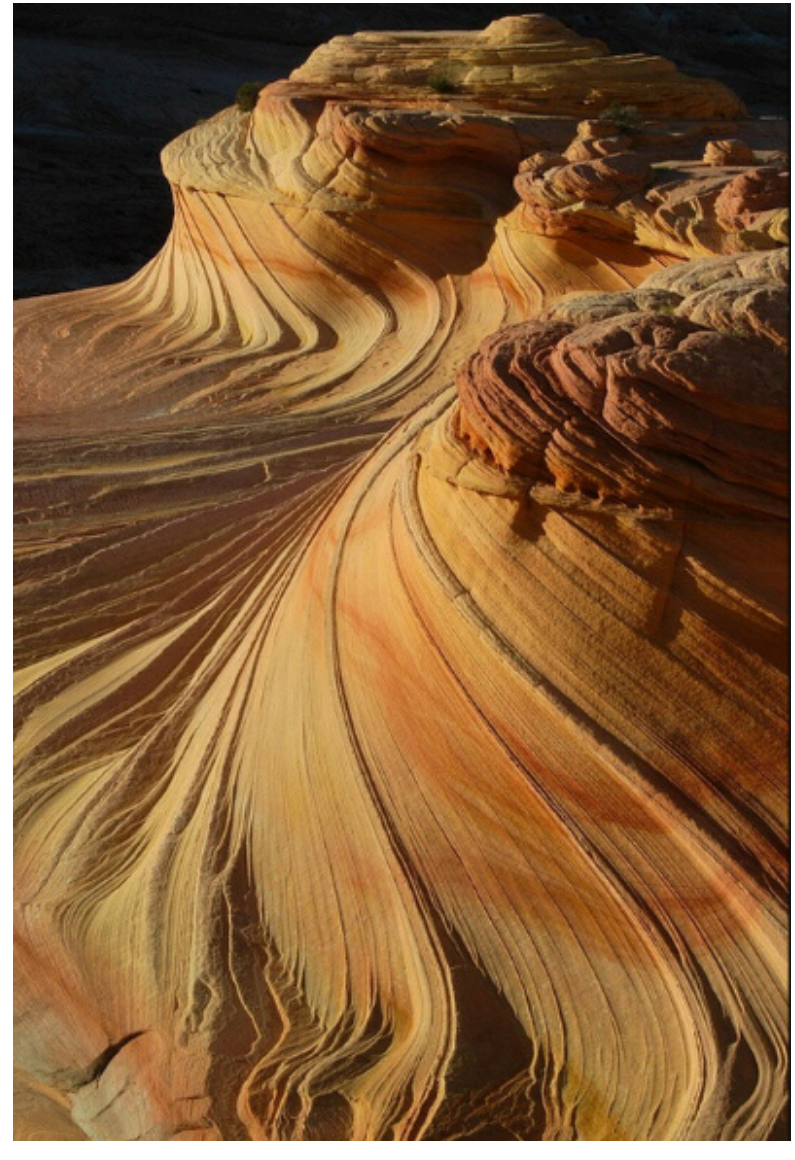
When the AC motor of the fan is powered, it drives the fan blades to spin rapidly, producing airflow and achieving the purpose of blowing wind.

Due to the resistance in the coil, part of the electrical energy is also converted into heat energy during operation.

Wind Makes Us Feel Cool

Because it speeds up the evaporation of heat from our bodies.

Masterpieces Created by Wind



Thank You Everyone!