



### Create your wind turbine prototype!

Watch the 'create' video, then use these instructions as a reminder to bring your design to life.

## Create your turbine

### Step 1

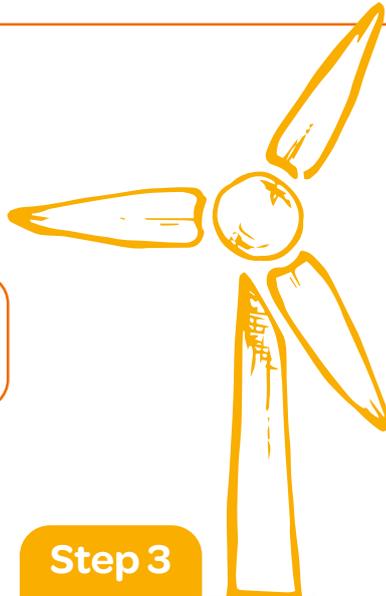
Make your blades out of your chosen materials using your design from Activity 3.2.

### Step 2

Add decorations to the front of your blades.

### Step 3

Attach your blades to popsicle sticks using hot glue. Wait for the glue to dry.



### What you'll need:

#### From your power kit

- Base
- Wooden dowel
- 3D printed bracket (the turbine nacelle)
- Motor
- Hub
- Popsicle sticks
- Wingnut and screw

You'll also need recyclable materials to create your turbine blades, and decorations to make it your own.

**Tip!** Using different materials to make your blades will get different results. Choose carefully.

### Step 4

Put the end of your dowel into the hole in your turbine base.

Give it a wiggle to check its stability.

### Step 5

Assemble the nacelle. Slide the motor into the nacelle and feed the motor's connector cable through the hole in the bottom of the nacelle.

### Step 6

Place the nacelle onto the dowel, slide to your desired height, and screw it tight using the wingnut and screw.

### Step 7

Put your blades into the slots in the hub.

Think about how they're spaced out!

### Step 8

Attach the hub to the motor pin.

**You now have a terrific turbine! Ka pai te mahi.**