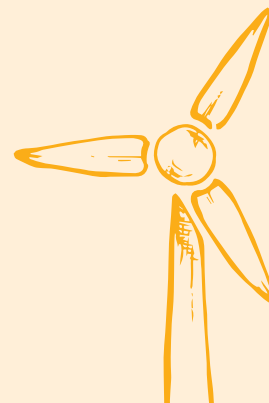




Wonder
Project

Power Challenge

Activity 3.2: Create



Let's create a turbine prototype.

Watch the 'create' video, then use these instructions as a handy reminder as you construct your masterpiece.

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.

Remember, using different materials to make your blades will get different results. Choose carefully!

Create your turbine!

Step 1

Using your final design from the imagine and plan stages, make your blades out of your chosen recyclable materials.

Step 2

Add decorations to the front of your blades to make them unique.

Step 3

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

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 have a terrific turbine.
Ka pai te mahi.**