

Become an Eco-Inventor

Lots of wonderful inventions are being worked on every day. Do you have an idea? Doodle it down below:

See more at life.org.uk/life-at-home/GoGreen

If you like these activities and would like Life to contact you if we have other cool stuff to share, or if you want to share your eco-inventions with us get an adult to drop us an email at lifethome@life.org.uk

We will only use this email address for the purpose of sending free activities or opportunities and won't hold your details for more than 24 months.

Life Science Centre has a packed summer of activities for you to try at home.



Life[™] AT HOME

This week we're taking inspiration from amazing inventors who are helping the world to...

Go Green

Great things can come when someone has an idea and keeps working to solve problems. William, a teenager from Malawi, had to drop out of school when he was 14. But he didn't give up learning. He went to his local library and taught himself about engineering and electricity before starting to collect objects nobody used anymore. He combined scraps of wood, bicycle parts and plastic tubes into a working windmill, which he used to bring electricity to his family's home.

In partnership with

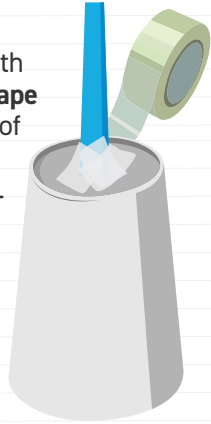


Whimsical Windmills

Engineers fix problems to make things better. Use your engineering skills to harness the power of the wind to make a moving toy.

STEP 1

- Cut a short length of a **straw** and **tape** it to the bottom of a **paper cup**.

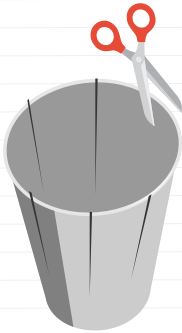


STEP 2

- Set the cup to stand upside down. This is your windmill base.

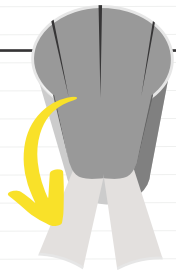
STEP 3

- Using **scissors**, make eight cuts in another **paper cup**, from the rim towards the base, about two thirds of the way down.



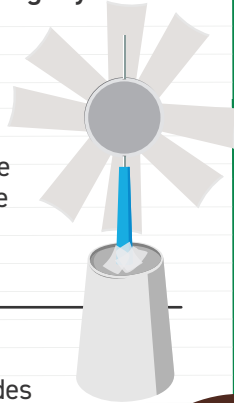
STEP 4

- Fold out the blades you just made.



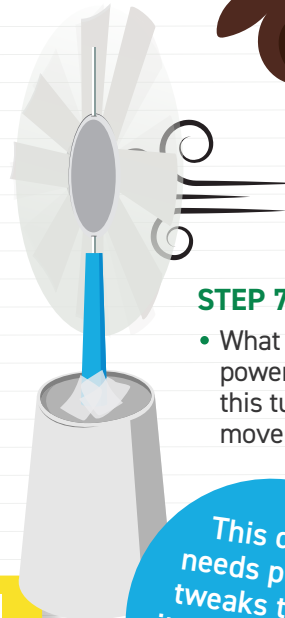
STEP 5

- Push a skewer through centre of the base of the cup and slide the skewer through the straw.



STEP 6

- Blow on the blades of your windmill, and the skewer will turn.



STEP 7

- What can you power with this turning movement?

This design needs plenty of tweaks to make it work well - can you solve these problems?

If you'd like a different way to make a whimsical windmill check out here:

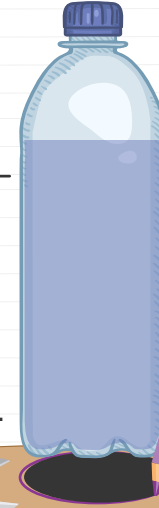


Dancing light box

Watch as water scatters light in mesmerising ways.

STEP 1

- Fill a **plastic bottle** with water.



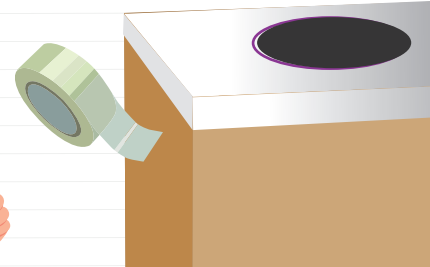
STEP 2

- Trace the bottom of the bottle on a **cardboard box** and cut it out using **scissors**.



STEP 3

- **Tape** some **kitchen foil** on the top of the box to help reflect light. Make sure to cut a hole in the foil too.



STEP 4

- Fit the bottle snugly in the hole (use tape to secure it if needed).

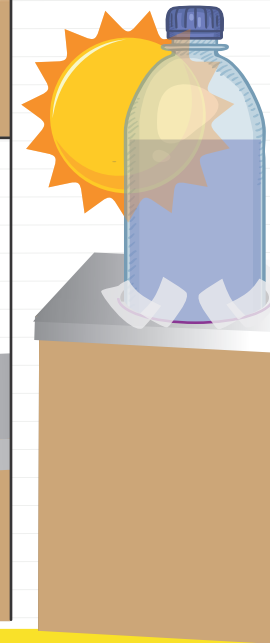


STEP 5

- Cut off a viewing window on one side of the box, just big enough to peek through.

STEP 6

- Put the bottle somewhere bright and look inside the box!



Bottle lights like this are used on the roof of buildings in many countries around the world to reduce the demand for electricity.