

The Awesomely Amazing Science club

WHIZZ POP BANG!

Pupil activity

MAKE A PADDLE BOAT

You will need:

- A clean black plastic food tray
- Another piece of black plastic packaging
- Five elastic bands
- Two pencils
- Sticky tack
- Scissors
- Glue
- A scrap of plastic bag cut into a 9 cm by 12 cm rectangle
- A paper straw



Print and follow the instructions to make a paddle boat.

Emmi's ECO club... PADDLE BOAT

Black plastic is often recyclable, but it can't be separated by sorting equipment used in recycling centres, which can't detect the colour black. Instead of sending it to landfill, let's use it to make something fun!

You will need:

- A clean black plastic food tray
- Glue
- Another piece of black plastic packaging
- A scrap of plastic bag cut into a 9 cm by 12 cm rectangle
- Five elastic bands
- Two pencils
- A paper straw
- Sticky tack

1 What you do:

Place two pencils inside two elastic bands (bands 1 and 2) and pull them apart, so that the elastic is taut.

2 Slide the plastic tray between the elastic bands. Band 1 should stretch across the top of the tray, and band 2 should go below it.

3 Push the pointed ends of the pencils so they lie alongside the long ends of the tray. Stretch band 3 around the pointed end of one pencil, then over the top of the tray and over the other pencil. Hook band 4 over the pointed end of one pencil, under the tray and over the end of the other pencil. Your two pencils should now be held in place.

4 Cut a paddle shape, like this, out of the other piece of black plastic. Our paddle is 4 cm square, but you can experiment with different sizes.

5 Wiggle the pencils so that they stick out from the end of the tray by about 5 cm. Wrap the end elastic band through the slit in the paddle and hook each end over a pencil.

6 Punch holes in the top and bottom of the plastic bag, plus the bridge over the middle, then slide it onto the straw. Slip the straw between the gaps in the elastic band towards the front of the boat, and fix it in place with a blob of sticky tack. Wind up the paddle, pop it in the bath and watch it go!

Try this...

- Adjust the level of the pencils to make sure that the paddle is in the water.
- If your boat isn't level in the water, move the position of the flag and mast.
- Does your boat go forwards or backwards? What happens if you wind the paddle in the other direction?

I'd love to see your paddle boats! Take a photo and send it to: Y@whizzpopbang.com

Black plastic food trays can also be used to:

- Grow seeds, like cress.
- Mix paints.

The best option is to recycle things packaged in black plastic in the first place! If your local shops don't offer much choice, ask an adult to email them to ask them to rethink their packaging!

It's up to us to save the planet! Lots of small actions can make a BIG difference!

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STEM challenge

We have made lots of different boats and learnt about surface tension. Can you combine what you have learnt and make your own unique boat. Give it a purpose; for example, it may need to transport something.



Send us a picture of your boat to:
Y@whizzpopbang.com