

How to Make a CD Hovercraft as a Science Experiment

Hovercrafts are absolutely brilliant and definitely a huge amount of fun - now's the time to make your own. You won't be able to sit on it and ride around but you will be able to have a huge amount of fun watching it glide around your desk! You'll learn a thing or two about friction too!



What do I need?

- Water bottle top
- Blue-Tac
- Balloon
- CD or DVD (that you don't mind if it gets scratched)



How do I do it?

STEP1 - Roll the Blue-Tac into a sausage shape and press it down onto the CD, in a circle. Push the bottle top down onto the CD so that it sticks to the CD with no gaps for the air to escape.

STEP2 - Blow up the balloon pretty full and then twist the bottom round several times (so the air doesn't all come out while you're attaching it to your hovercraft base!)



STEP3 - Let's take your hovercraft for a test drive! Stretch the balloon over the bottle top, untwist the balloon and you're off. Try pushing your hovercraft gently and watch how far it glides!

What's going on?

Why do hovercrafts glide so effortlessly? It all has to do with friction, or lack of it! As the air comes out of the balloon it spreads out under the CD so the hovercraft isn't



actually touching the table but floating just above it on a cushion of air!

WARNING: Don't do this experiment if you need to be somewhere, it's impossible to resist the temptation to have another go - it was for me anyway!

More Fun Please - Experiment like a real scientist!

- Try adding weight to your hovercraft, maybe more Blue-Tac, how does that change things?
- What about blowing the balloon up more, or less?
- Can you find a way to extend your hovercraft, make the base even bigger, how does that change things?