



## What you need:

- Blank CD or DVD
- Sports bottle cap (push-pull style)
- Balloon
- Tape
- Scissors (optional)

## What you do:

- Step 1: Pull open the sports bottle cap and place it on the center of the CD.
- **Step 2**: Take a small piece of tape and place it from the top of the ridged part of the cap to the edge of the CD. Press firmly. Repeat with three more pieces of tape until you have a cross pattern on the CD.





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- **Step 3:** Tape around the ridged portion of the cap, and tape around the base of the cap that sits on the CD. Make sure the edge of the sports bottle cap is completely sealed to the CD. This step secures the four pieces of tape.
- Step 4: Inflate a balloon and twist the neck to keep the air in.
- Step 5: Place the opening of the balloon onto the cap, but keep the balloon neck twisted.
- **Step 6:** Place your hovercraft on a flat, smooth surface. Untwist the balloon and give your hovercraft a tap in any direction. Watch it go!

## What's going on:

The air from the balloon passes through the cap. This creates a higher air pressure below the CD than above it. This high pressure lifts the hovercraft allowing it to glide smoothly, with almost no friction!

## Now try this:

What other machines work because of differences in air pressure? Can you think of other materials you can use to build a hovercraft or other vehicles?

