Pressure

Simple hovercraft

The effect of reduced friction

You will need...

- ✓ Balloon
- ✓ CD
- ✓ Empty thread spool
- ✓ Glue

Background:

A hovercraft uses a cushion of air to reduce friction.

Follow these steps:

- 1. Use the glue to stick the CD to the bottom of the spool.
- 2. Inflate the balloon.
- 3. Stretch the mouth of the inflated balloon over the top of the spool.
- 4. Put the assembly on the table and observe.

So what happened?

Air from the balloon escapes through the hole in the centre of the CD. This provides a cushion of air under the CD and reduces friction with the surface. The 'hovercraft' can then move easily across the table.

What next?

- 1. What is the effect of using a bigger balloon or placing it on different surfaces?
- 2. Find out more about different designs and uses of hovercraft.

