# **Balloon Hovercrafts**

## Sections













# Challenge Areas



COMMUNITY







**CREATIVE** 

### **Scout Method Elements**







**LEARNING BY DOING** 















## **SPICES Growth Areas**



**SOCIAL** 











#### The Adventure

Let's make a simple hovercraft out of an old CD, a balloon and a pop-top lid. Then watch it glide over the floor on a cushion of air. Why not make some with your fellow Scouts and have a race? Why not make some predictions about what is happening and why?

#### Plan

Materials needed:

- Balloon
- CD
- Blue tack (or hot glue gun with leader assistance)
- Pop-top lid

#### Do

- 1. Begin working on a smooth surface.
- 2. Roll the blue tack into a blue tack snake. Make it long enough to wrap around the base of the pop-top lid.
- 3. Stick the pop-top lid to the CD. Try to keep it as centred as possible.
- 4. Close the pop-top lid.
- 5. Blow up the balloon and stretch it over the lid. If the lid is closed, there should be no air rushing out of it.
- 6. Place the hovercraft onto a smooth surface. Open the lid (this is easier to do with 2 hands) and give the hovercraft a push. It should glide across any smooth surface.

### Review

Now let's explain what is happening. Air is coming out of the balloon and is pushing the CD upwards. When we push the CD it "floats" across the table. The air pressure makes a thin cushion of air between the surface and the CD. However, if the surface has a lot of friction the hovercraft cannot float.

## Safety

Allergy risk: This activity uses balloons which contain latex.