

15-Minute Family STEAM: Balloon Hovercraft

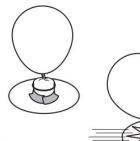
Supplies Provided:

CD Balloon Top from a sports bottle

Supplies From Home:

Strong tape OR Hot glue Optional: items to decorate the CD

- 1. Optional--if you would like to decorate your CD, use permanent markers or stickers on the shiny side
- 2. Tape or Glue the bottom of the sport drink cap to the shiny side of the CD, making sure that the hole in the cap and CD are aligned. Hold for a few seconds or until the glue is dry.
- 3. Put the balloon over the top of the sport drink cap. (optional: tape the balloon to the sports drink top)
- 4. Blow up the balloon through the CD
- 5. Pinch or twist the neck of the balloon to prevent the air from escaping
- 6. Place the hovercraft on the ground and let go of the balloon





The Science

The small hole in the center of the CD forces air escaping from the balloon downwards. This creates an opposite force upwards which lifts the hovercraft off the ground, explained by Newton's Third Law of Motion. The CD spreads out this force evenly along the bottom of the hovercraft.

Having a thin layer of air helps also helps the hovercraft move by reducing the amount of friction between the CD and the ground.

Take in part from <u>scienceworld.ca/resource/balloon-hovercraft</u>



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