



Hovercraft

Lesson: Motion and Friction

Materials Needed:

- Balloon
- Glue
- Pop-top lid*
- CD or DVD*
- Stopwatch or timer*



**Teacher provides these items or student brings from home.*

Steps:

- Remove a pop-top lid from a plastic drinking bottle.
- Glue the base of the pop-top lid to the CD (or DVD) so that the lid covers the hole in the center of the CD. Allow the glue to dry completely.
- Blow the balloon up as large as you safely can without popping it. Then pinch the neck so that no air can escape. (Re-do this step with less air).
- Stretch the neck of the balloon over the closed pop-top lid, being careful not to let any air escape. Carefully center the balloon's opening above the pop-top lid opening.
- Your hovercraft is now ready to do some hovering!

Discuss:

- How long did the hovercraft hover?
- How long did the hovercraft hover when the balloon was fully inflated?
- How long did the hovercraft hover using a partially inflated balloon?
- Did the hovercraft hover for about the same amount of time each, why?

