



QUICK PROJECT

RECYCLED MATERIALS HOVERCRAFT



AUTHORIZED AMA
STE(A)M PROGRAM



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MODEL AERONAUTICS EDUCATION DEPARTMENT

MODELAIRCRAFT.ORG | AMAFLIGHTSCHOOL.ORG

SUPPLIES

Old/discarded CD/DVD

Plastic sports water bottle cap (the kind with a pull-push valve)

Balloon

Hot glue (with ADULT SUPERVISION, hot glue is recommended for this project)

A clean, smooth, flat surface

Instructions:

1. Place the cap over the hole in the CD/DVD.
2. Glue it in place using hot glue to ensure a tight seal.
3. Close the cap.



4. Blow up the balloon.
5. Keep the air inside the balloon by pinching it closed about 1/2 inch from the mouth.



6. Stretch the mouth of the balloon over the water bottle cap.

7. Place your hovercraft on the flat surface of your choice.



8. Without pulling the balloon off, open the cap.

9. Give the hovercraft a gentle push and watch it glide away!

10. Remove the balloon and blow it up again and again to make your hovercraft float! Try blowing up the balloon more or less to see how that influences the speed, distance, and duration of the hovercraft's "flight."

RECYCLED MATERIALS HOVERCRAFT

4TH GRADE SCIENCE STANDARDS (INDIANA)

4.PS.1 Investigate transportation systems and devices that operate on or in land, water, air and space and recognize the forces (lift, drag, friction, thrust and gravity) that affect their motion.

4.PS.2 Investigate the relationship of the speed of an object to the energy of that object.

4.PS.4 Describe and investigate the different ways in which energy can be generated and/or converted from one form of energy to another form of energy.

4.PS.5 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

Don't let perfectly good materials go to waste! Build your very own hovercraft by rescuing items such as plastic water bottles and scratched up CDs and DVDs from the trash.