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AIM KITS

HOVER CRAFT

September 2024

September 2024: Hover Craft

This Month's AIM Kit is making a Hovercraft. Have you ever wondered how hovercrafts float above the ground, seemingly defying gravity? With this simple project, you'll get to build your very own mini hovercraft using just a CD and a balloon! This hands-on activity is a fantastic way to explore the principles of air pressure and friction, all while having fun watching your hovercraft glide across a flat surface.

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MATERIALS NEEDED:

1. CD or DVD
2. Balloon
3. Pop-top cap (from a plastic bottle, like a sports drink bottle)
4. Strong glue or double-sided tape

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PROCEDURE:

1. Use strong glue or double-sided tape to securely attach the pop-top cap over the hole in the center of the CD. Make sure there are no gaps so that air won't escape.
2. Blow up the balloon but don't tie it. Instead, pinch the neck of the balloon to keep the air inside.
3. Stretch the neck of the balloon over the pop-top cap, making sure it's snug and secure.
4. RePlace the CD flat on a smooth surface and release the balloon's neck by opening the pop-top cap. Watch as the air from the balloon escapes through the hole, creating a cushion of air that allows the CD to hover and glide!

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WHY IT WORKS:

The hovercraft works by creating a cushion of air between the CD and the surface it's on. When you release the air from the balloon, it escapes through the small hole in the pop-top cap, reducing the friction between the CD and the surface. This cushion of air lifts the CD slightly, allowing it to hover and move smoothly. The principles of air pressure and friction are at play here—without much friction to slow it down, the CD can glide easily across flat surfaces, just like a real hovercraft!

Contact Us

+1 225-800-STEM (7836)

info@stemducate.org

About STEMducate

STEMducate is a non-profit organization dedicated to creating and promoting STEM to students from a young age to increase their curiosity and imagination. Our goal is to expose students to STEM opportunities and careers, enabling them to dream big and make their dreams a reality. We provide positive and powerful opportunities and experiences in STEM fields for people of all ages. These initiatives will hopefully entice students toward becoming the next innovators, educators, researchers, and leaders. We aim to reduce the number of unfilled jobs due to the lack of specialized skills that are needed to perform job tasks.

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