

Paper Hovercrafts



Materials:

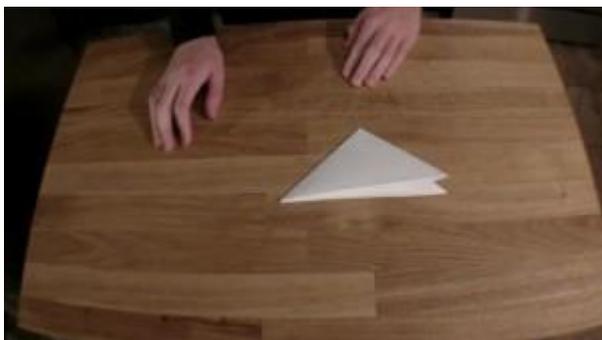
- Square Paper

Instructions:

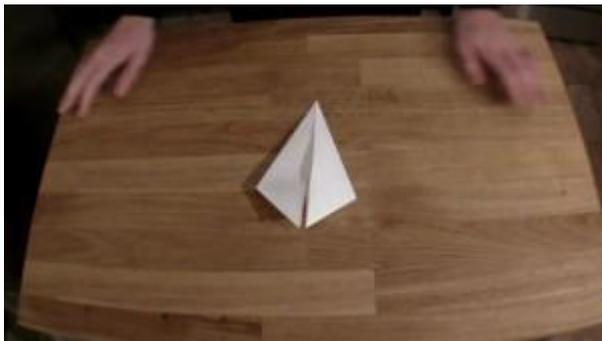
1. Start by folding the square in half corner to corner to make a triangle.



2. Fold that triangle in half corner to corner to form a smaller triangle.



3. Unfold the previous fold to get the larger triangle. Fold the edges of the triangle into the newly-made crease to form a kite shape.



4. Fold the inside edges of the kite shape toward the outside edges as shown.



5. Turn the paper upside down and blow gently into the open end. Your hovercraft should zoom away!



How it Works:

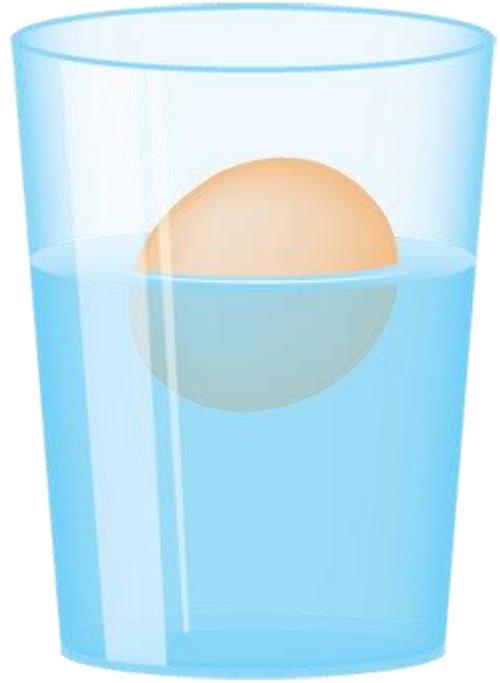
The pocket under the hovercrafts trap air and create a zone of high pressure. Further, the air moving over the craft has lower pressure. This difference creates lift and gets rid of the friction that normally holds the paper in place on the table. Without friction holding it back, a little breath is all it takes to get the hovercraft speeding on its way!

Extra Experiments:

1. These little hovercrafts are so easy to make, it doesn't take long to build some out of different materials (newspaper, cardboard, aluminium foil) or different sizes see which ones drive the straightest, go the fastest, or take the most breath to get moving!

Floating Egg

What happens when you put an egg in a glass of regular water? This is a cool way to learn about density.



Materials:

- One egg
- Water
- Salt (1 - 2 cups)
- A tall drinking glass
- A spoon

Instructions:

1. Pour water into the glass until it is about half full.
2. Place an egg in the glass of water and see if it sinks or floats (it should sink).
2. Stir in lots of salt. Start with 1 tablespoon and stir it until the salt dissolves. Keep adding more salt until the egg floats.
3. Next, carefully pour more fresh water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water). If you're very careful, you can get the egg to float between the fresh and saltwater!

How It Works:

The egg is denser than the fresh water this causes it to sink. When you start dissolving salt in the water, this is increasing the density. Eventually the water becomes denser than the egg causing the egg to float. When you carefully add fresh water again, this fresh water is less dense than the salt water so it floats right on top!

Extra Experiments:

Are there other liquids you can add to make the egg sink or float?

What else can you dissolve in the water to make the egg float?

Warm, Room and Cold

Fill 3 bowls of water - one should be very warm, one room temperature, and one cold.. Place one hand in the warm water bowl and one in the cold. After a minute, place both hands in the room temperature bowl. How do they feel?