

# Rocket Experiment



# Materials of the rocket experiment

- 1.5 liter bottle
- This
- cork stopper
- Cardboard
- Glue
- foot pump
- Needle

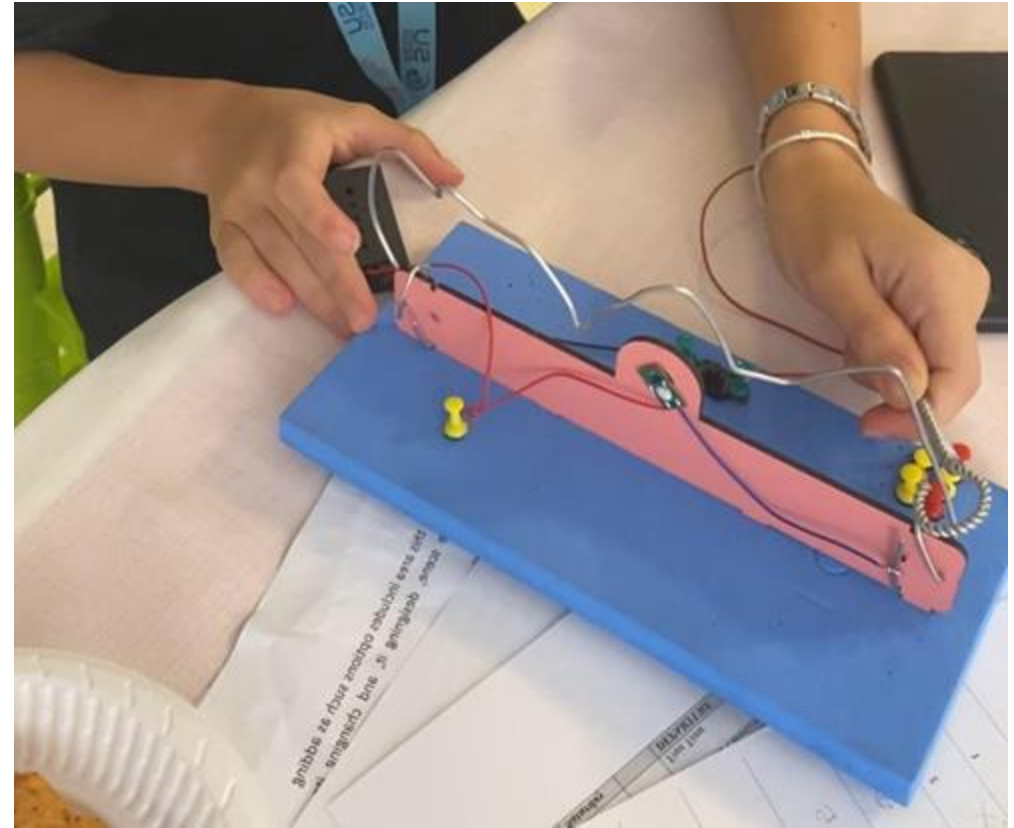
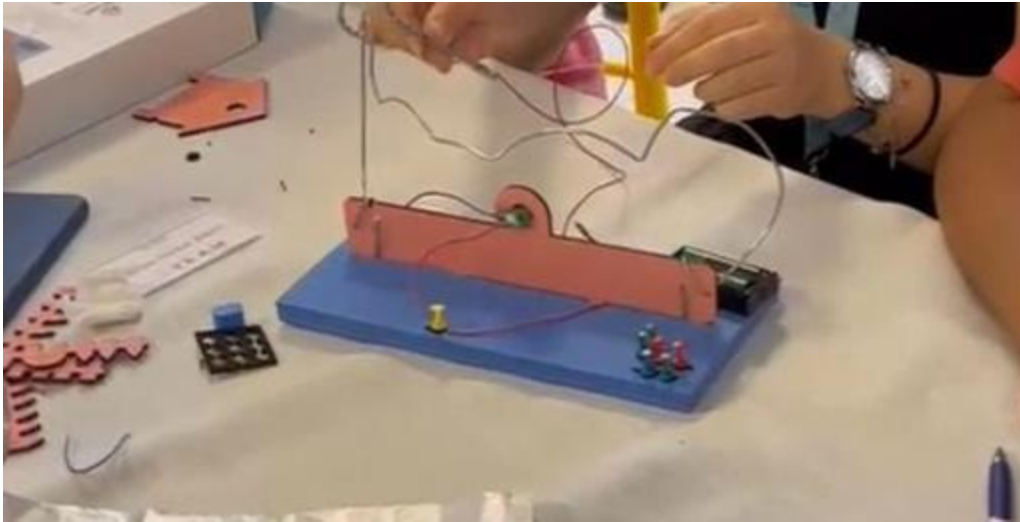
# Steps of the rocket experiment

- Triangular and rectangular shapes are cut out of cardboard to represent the legs of the rocket. It is glued to the bottle.
- The bottle is half filled with water.
- The mouth of the bottle is tightly closed with a cork stopper to prevent air.
- The pump needle is inserted into the middle of the cork stopper and the pump is connected to the mechanism through this needle.
- Air is pressed into the bottle with the foot pump.

# How the rocket experiment works

- As compressed air is added, the air bubbles formed pass through the water and collect on the top of the water, compressing the volume of air at the top of the bottle.
- The bottle is separated from the pump.
- Water is pushed out of the bottle with the help of compressed air. The bottle moves away from the water in the opposite direction, in accordance with Newton's Third Law.
- Additionally, this experiment explains air pressure to us.

# Ring Game and Home Alarm System Experiment



# Experiment Materials

- Eva board
- MDF Parts
- Fasteners and separators
- 1pc Metal fastener
- 4 cable lugs
- 1 snap key
- 2 screws

# Experiment Materials

- 1 washer head screw
- 1 battery bed
- 2 batteries
- 1 DC motor
- 1 macaron
- 1 buzzer aluminum wiring metal
- aluminum foil

# How to do the experiment

- Let's start with the pins first. Let's get our pushpins and black Eva. Let's dip our pins right in the middle of the black Eva. Let's remove Eva without moving the pins.
- Now let's install the washer of our cable. Let's strip the end of the cable and pass the cable through the small hole, wrap it around the washer and tighten it.
- Let's do the same for the battery bed and buzzer. Let's fix our battery bed in place. For this, let's place the two screws as shown in the picture and tighten the screw.



# How to do the experiment

- Now let's look at how to make connections. We can provide the connection as shown in the picture by using the pin we have prepared.
- Let's take the specified MDF piece and our thick wire and pass it through the small holes as in the picture. The part coming out from the back should be around 8 centimeters. Then, let's fold it forward from the specified places and fold the remaining end back. Now we can replace it.

# How to do the experiment

- Now let's fix the buzzer and then connect the blue lead coming from the buzzer to the wire as shown in the picture, using the washer head screw.
- Let's attach the 4 legs of the MDF to the blue Eva. Let's combine the two increasing red wires.
- Now let's assemble the ring. Let's put the black tubing on the other end of the cable, on one end of which we put a spacer, and wrap it around the stem of the ring. Let's cover the cable with black tubing and fix the handle of the ring with the help of a lighter, as in the video. Let's attach the stamped end of the ring to the key and get it ready to play.