



Pom Pom Popper

Get ready to unleash the thrill of scientific discovery with the “Pom Pom Popper” experiment! Explore the fascinating world of inertia and launch colourful pom poms into the sky with this hands-on activity that’s bound to ignite your curiosity.

Materials

- 🚀 2 soft plastic cups
- 🚀 30 cm round balloon
- 🚀 Small pom-poms
- 🚀 Tape
- 🚀 Scissors



Method

Step 1: Carefully cut the base out of each cup.

Step 2: Cut off the nozzle of the balloon and throw it away. Stretch the bulb of the balloon around the mouth of one cup so that it is taught and there are no dimples on the flat surface. Fasten the balloon in position with masking tape.

Step 3: Tape the two cups together base-to-base to make an hourglass shape. Make sure there are no sticky surfaces poking through the gaps on the inside of the catcher.

Step 4: Drop the pom-pom into the catcher. Pinch the middle of the balloon surface, pull it firmly down and then LET GO! The pom-pom should POP into the air!

Step 5: See if you can catch the pom-pom in the catcher. Then, pull back the balloon for another POP! Experiment with how tightly you pull back on the balloon to change the flight path of your pom-pom

What is happening? The Science explained.

Initially, the pom-pom sits motionless inside the popper. Stretching the balloon stores up potential energy. When you let go, the balloon returns to its original shape and exerts a pushing force on the pom-pom. This force is enough to overcome the pom-pom’s inertia and causes it to fly into the air!

