HOW DO FIREWORKS FLY?



Just like a rocket, fireworks fly into the sky using a burst of super-hot gas! When you light a firework, chemicals inside start to burn and create lots of hot air and gas. That gas wants to escape, so it shoots straight down out of a tiny hole at the bottom.
Because the gas pushes down so hard, it creates a powerful push that shoots the firework way up high into the sky.

AS THE GAS PUSHES DOWN ON THE LID (ACTION), THE CANISTER SHOOTS UP INTO THE AIR (REACTION)!

FOR EVERY ACTION, THERE IS AN EQUAL AND OPPOSITE REACTION.

FILM CANISTER ROCKET INVESTIGATION

You'll need

Film canister or effervescent vitamin tablet container
Effervescent vitamin tablet
Water
An outdoor space with a hard surface





Instructions

Fill the film canister about a third full with water.
Carefully break an effervescent vitamin tablet in half.
Drop the half tablet into the canister and quickly replace the lid.
Holding the lid in place, put the canister lid down on a hard surface outdoors.

Stand well back and do not lean over the canister, it will shoot up quickly!!

Why does the film canister fly?

When the effervescent vitamin tablet reacts with water, it releases carbon dioxide (a gas). The carbon dioxide builds up inside the canister, increasing the air pressure. When the canister can no longer withstand the extra pressure it pops off the lid and shoots up into the air.