MANCHESTER 1824
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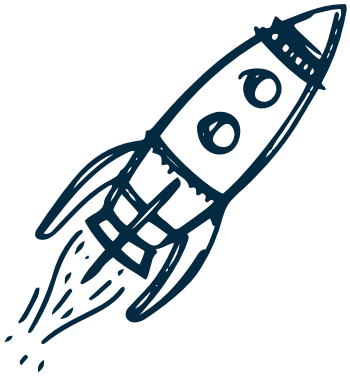
Jodrell Bank Observatory

Jodrell Bank Discovery Centre



Moon Landing 50th

Rocket Lab

MISSION #2: Make a Popping Rocket

1 YOU WILL NEED:

- A small container with a lid – an old film canister works well (ask an adult if you're not sure what that is!)
- A fizzing tablet (like Alka-Seltzer or a vitamin c drink tablet)
- Water

2 HOW TO MAKE YOUR POPPING ROCKET:

- Go somewhere where you don't mind making a little mess like your kitchen or garden. This experiment can make things a bit sticky!
- Break the fizzing tablet in half
- Put a teaspoon of water in the container

3 HOW TO LAUNCH YOUR POPPING ROCKET:

DO THE NEXT 2 STEPS QUICKLY, ONE AFTER THE OTHER

- Drop the tablet into the container
- Put the lid tightly on the container and STEP BACK at least 3 big steps
- After a few seconds, you will hear a Pop! And the lid will launch into the air

4 SAFETY:

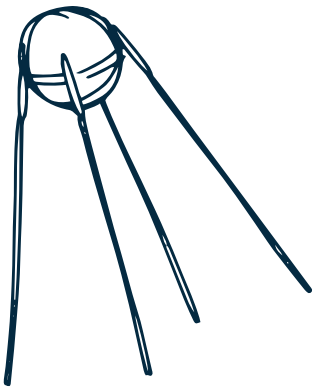
- Ask an adult for permission before your start
- Carry out the experiment somewhere where it is ok to make a little bit of a mess
- Step back at least 3 big steps after you have put the lid on. You don't want the rocket to hit you
- IF IT DOES NOT LAUNCH, wait at least 30 seconds before checking the container. Usually the problem may be that the lid wasn't secure enough and the gas escaped slowly

5 HOW DOES IT WORK?

When you add the water it starts to dissolve the fizzing tablet. This creates a gas called carbon dioxide. As the carbon dioxide is being released, it creates pressure inside the film canister. The more gas that is made, the more pressure builds up until the cap is blasted off into the air.

6 EXPLORE FURTHER...

Investigate how changing the ingredients changes the results. Does the water temperature affect the rocket launch? Does the size of the tablet or amount of water change the amount of time before it pops? What about the height of the rocket? What happens if you add a paper nose cone to the lid?



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