



'Pop' goes the rocket to the Moon!

SEN FOCUS

SLD – sequencing, following instructions, anticipation, responding to sound and movement



ACTIVITY OVERVIEW

Pupils create their own rockets using film canisters and antacid or effervescent vitamin tablets. Their challenge is to launch them to the Moon!

Key vocabulary/symbols required: water, tablet, fizz, gas, carbon dioxide, dissolve, fastest, slowest, up, moon, first, last

Description of Activity

- Count out 3, 2 and 1 effervescent tablets.
- Remove the lids of all three pots and put a teaspoon (5ml) of water into the canister

Do the next 2 steps quickly:

- Drop the tablets into the canisters and snap the cap onto the canister tightly.
- Put the canister on the table/ground, cap side down and step back.

A few seconds later, you will hear a 'POP!' and the film canister will launch into the air.

Health and Safety: remind pupils not to stand over the canisters or return to them until they have popped.

RESOURCES

Picture of the Moon	6 effervescent antacid or vitamin C tablets
3 film canisters and lids	Timers
Water - 5ml spoon	
Pipettes	

QUESTIONS/FURTHER LEARNING

- Which pot will launch to the Moon first?
- Does water temperature affect how fast the rocket launches?
- Does the amount of tablet affect how long it takes the rocket to launch?
- How much water will give the quickest launch?

KEY FACTS/SCIENCE

When water is added, it starts to dissolve the tablet. This allows chemicals in the tablet to react together (they cannot do this without water present). One of the products of this reaction is a gas called carbon dioxide. As the carbon dioxide is released, it creates pressure inside the film canister. The more gas that is made, the more pressure builds up, until eventually the cap is forced off the container. The force downwards creates thrust in the opposite direction and the rocket blasts up.