

## Rocket Power

Develop children's understanding of the world around us and problem solving with two exciting (and explosive!) activities.

### Learning aims

- Understanding the world around us
- Maths, problem-solving, measurement
- PSED – working together
- Literacy and IT
- Physical development.

### Fizzy rockets

#### Resources

- Effervescent vitamin tablets
- Film canister / effervescent vitamin tablet tube
- Water.



#### Activity outline

1. Go outdoors and find a level solid area from which to launch your fizzy rocket
2. Fill the film canister or tube a third of the way up with water (can the children tell you what a third is? Can you explain it?)
3. Add the vitamin tablet to the water, place the lid on quickly, turn upside down so the lid is on the ground and stand well back
4. Wait and watch the tube launch into the sky
5. What do the children think has happened to launch the rocket? How high do they think it went?
6. You can decorate the canister to look more like a rocket if you wish.

## Information

When the vitamin tablet reacts with the water it releases carbon dioxide. The carbon dioxide builds up inside the canister, increasing the air pressure so much that when the canister can take no more it pops off and shoots up into the air.

## Balloon rockets

### Resources

- Cardboard tubes / large straws
- Balloon and balloon pump
- String and sticky tape
- Measuring sticks.



### Activity outline

1. Thread the large straw or cardboard tube through a long piece of string
2. Attach the string to solid items at both ends so the string is taut
3. Attach the balloon to the tube using the sticky tape
4. Use the pump to blow the balloon up, hold onto the end and count down from 10, then let go!
5. How far does the balloon go along the line? Let's measure it?
6. How do we think the balloon moved? How can we make it move further?

You may choose to add more weight to the balloon to see the effect as well – ask the children if they think how far it will go and why.

### Working with babies

For your babies consider supporting their exploration skills by creating a sensory investigation board.

- Collect the plastic flip lips off baby wipe packets and attach these to a board
- Under each of these add different materials for the babies to touch and explore e.g. CD, ribbons, lace, rubber, crinkled paper
- Sit with the babies and play alongside them lifting the flaps and feeling the materials inside
- Switch these over on a regular basis to introduce new and different textures.