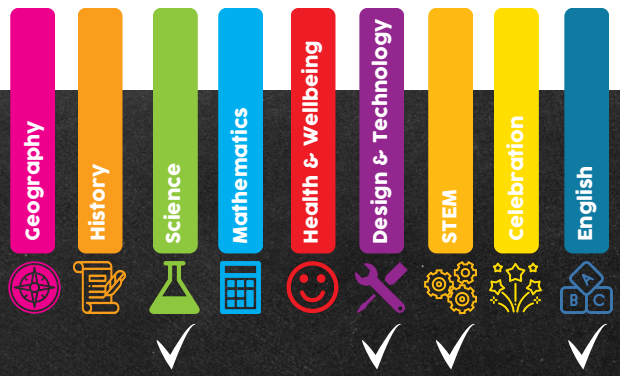


# Supreme Incursions

## Fireproof Balloon



Adult  
Demonstration  
Essential



20 Minutes



Grade 2 +

Can you do magic? Can you put a flame to a balloon and not pop it? Now wouldn't that be cool!...

### The aim

- To understand why water can aid in stopping a balloon from popping, when exposed to heat!



**Caution:** Matches and flames should be completely out of reach of all children. Adults to perform this experiment at all times.



### What you will need

Balloon (it's handy to have a spare as back up too)

Candle and Matches

Access to a tap

### Watch the video

Scan the QR code to watch the instructions



### Follow these steps

**Step 1** Fill the balloon with approximately 2-3 cups of water straight from a tap. Then carefully inflate the balloon with air.

**Step 2** Light the candle using a match.

**Step 3** Hold the balloon over the lit candle, with the water filled balloon being exposed to the heat.

**Step 4** Experiment with the amount of time that you hold the balloon near the candle and the amount of water in the balloon. Document what you observe.

- Feeling brave? Why not grab a rain coat and test this one out over a child's head! Adult-led only.

### The Science behind it

Water is a great substance for soaking up heat. The thin latex balloon allows the heat to pass through very quickly and warm the water. As the water closest to the flame heats up, it begins to rise. Cooler water replaces it and soaks up more heat. The process repeats . . . until the heat of the flame is greater than the water's ability to conduct heat away from the thin latex and the balloon pops!