

# Supersize Marshmallows

## The Science Behind the Experiment – A Guide for Adults

Pumping the air out of the bottle changes the pressure inside the bottle. A plastic bottle would collapse in on itself but the solid glass bottle is strong enough to keep its shape. Marshmallows are full of tiny air bubbles and when the air is pumped out of the bottle, the bubbles are at a much higher pressure than the surrounding air. The air in the bubbles pushes outwards, the air molecules move further apart, the bubble gets bigger. We see the marshmallow stretching and growing larger.

## Science Experiment

### Supersize Marshmallows

What is in the bottle? (Marshmallows)

Is there anything else in the bottle? (Air)

What is being pumped out of the bottle?

What is happening to the marshmallows?

What happens when we let the air back into the bottle?