

Bottle and Balloon

Approach: Station

Level: Year 8 & year 4

Resources: Video showing a limp balloon attached to the mouth of a bottle. When the bottle was placed in hot water, the balloon partially inflated.

In this activity you will watch a video about a balloon on a bottle.

Play the video and watch what happens to the balloon.

1. What happened to the balloon?

Air expanded and blew up the balloon
Balloon blew up

% responses
year 8 *year 4*

3
88

1
88

2. Why does this happen?

Heat causes air to expand
Heat has some effect
Steam fills balloon (incorrect)

12
51
24

4
42
20

Commentary

Few students understood that the heat caused the air to expand. Many used an explanation related to hot air rising, while many others said that the balloon filled with steam.