

Which of the following is the best analogy for the process of inhalation and exhalation during normal breathing?

1. Like a piston in an engine, drawing air in and forcing air out with every stroke.
2. Like stretching out a balloon and then letting it return to normal.
3. Like blowing up a balloon to inflate it and then letting it deflate to push the air out.

The correct answer is 2. 3 is incorrect because it implies that the lungs inflate due to an increase in pressure outside the lungs, instead of a decrease in pressure inside the lungs. 1 is correct but not the best answer because it implies that the body is using a muscle to actively force air out, whereas during normal breathing exhalation is driven by passive lung recoil instead.