

# Thermal machines and the Industrial Revolution

## The two-stroke engine

carries out →

**THE FOUR PROCESSES OF THE FOUR-STROKE CYCLE ENGINE IN ONLY TWO STROKES: AN UP STROKE AND A DOWN STROKE OF THE PISTON**

### THE FIRST STROKE OF THE PISTON

This is shown in the illustration as processes 1, 2 and 3. In process 1, the gases are expelled. They are compressed (2) in the same stroke of the piston. The mixture is ignited in 3.

### THE SECOND STROKE OF THE PISTON

Number 4 marks the pre-compression of the gases, and number 5 is where the gases flow into the cylinder.

