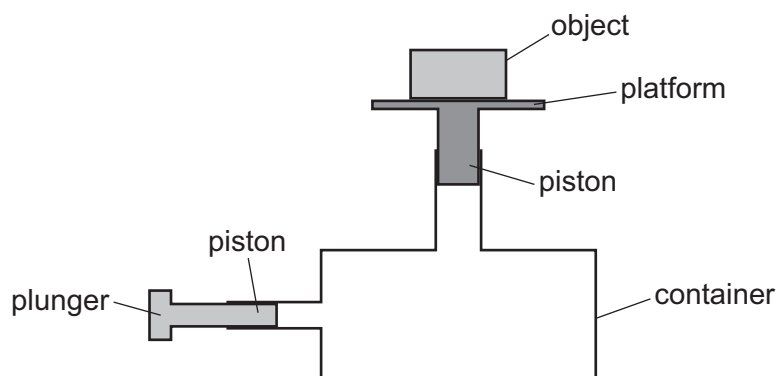


- 15** A stone is falling vertically through the air at a constant (terminal) velocity.

Which energy change is occurring?

- A** gravitational potential energy to thermal energy
  - B** gravitational potential energy to kinetic energy of the stone
  - C** kinetic energy to gravitational potential energy of the stone
  - D** kinetic energy of the stone to thermal energy
- 16** An object of weight 12 N rests on a platform on top of a container with two pistons, as shown. The container contains a fixed mass of gas, and the pistons are free to move.



The plunger is slowly pushed 4.0 cm to the right. As a result, the object slowly moves upwards a distance 0.50 cm.

How much work is done on the object?

- A** 0.060 J      **B** 0.48 J      **C** 6.0 J      **D** 48 J