

**11** Which statement about internal energy is correct?

- A** When the internal energy of a system is increased, its temperature always rises.
- B** The internal energy of a system can be increased without transfer of energy by heating.
- C** When two systems have the same internal energy, they must be at the same temperature.
- D** The internal energy of a system is the sum of the heat transferred to the system and the work done on the system.