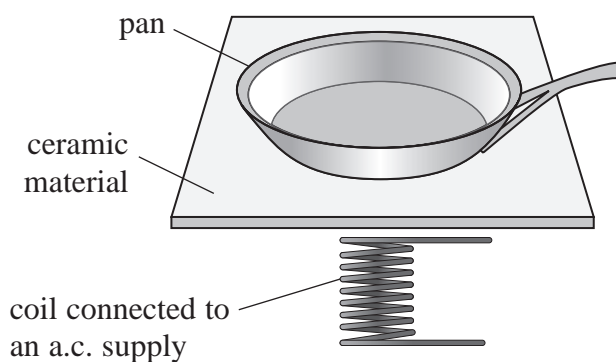


- 11** An induction hob consists of a coil beneath a sheet of ceramic material. The coil is connected to an alternating current (a.c.) supply as shown.



- (a) A steel pan containing water is placed on the induction hob.

Explain why the pan becomes hot when the supply is switched on.

(4)

- (b) The a.c. supply to the coil in an induction hob has a much higher frequency than normal mains frequency.

Explain why this is an advantage in this case.

(2)