



Interactive Example Candidate Responses

Paper 3 (May / June 2016), Question 3

Cambridge IGCSE™
Physics 0625



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3 Fig. 3.1 shows a metal plate-warmer.

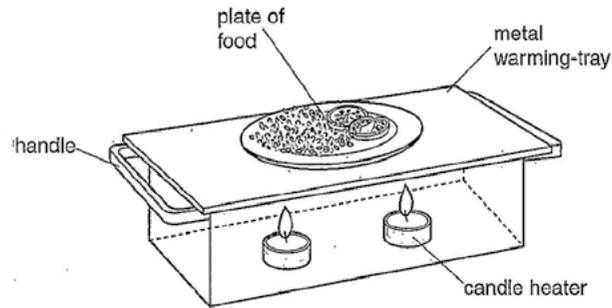


Fig. 3.1

The plate-warmer contains two small candle heaters. Plates of food are placed on top of the warming-tray.

(a) (i) State the name of a process by which the thermal energy from the candles passes to the warming-tray.

..... radiation [1]

(ii) State the name of the process by which thermal energy moves through the warming-tray.

..... convection [1]

(b) The outside of the plate-warmer is shiny.

Suggest how this helps the plate-warmer to stay hot.

~~It conducts heat and prevents heat from being lost~~ [1]

(c) The handles of the plate-warmer are made from metal.

Identify a problem with this, and suggest how the problem could be solved.

problem: metal conducts heat hence the handles will be too hot to touch.

action: make the handles out of something that does not conduct out of heat, [2]

[Total: 5]

Your Mark

3(a)(i)

3(a)(ii)

3(b)

3(c)

Q3	Mark scheme
(a)(i)	convection OR radiation
(a)(ii)	conduction
(b)	poor emitter OR poor radiator (of thermal energy)
(c)	(handles) become hot use an insulator

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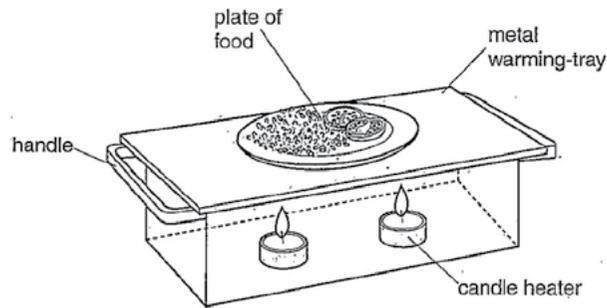


Fig. 3.1

The plate-warmer contains two small candle heaters. Plates of food are placed on top of the warming-tray.

(a) (i) State the name of a process by which the thermal energy from the candles passes to the warming-tray.

..... thermal energy [1]

(ii) State the name of the process by which thermal energy moves through the warming-tray.

..... it moves the smoke up to the tray [1]

(b) The outside of the plate-warmer is shiny.

Suggest how this helps the plate-warmer to stay hot.

..... get reflection [1]

(c) The handles of the plate-warmer are made from metal.

Identify a problem with this, and suggest how the problem could be solved.

problem: The handle could be heated and difficult to touch.

action: Using a product that is against heat or use gloves [2]

[Total: 5]

Your Mark

3(a)(i)

3(a)(ii)

3(b)

3(c)

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