Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Energy (Low Demand)

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Name of the Student:_____
Max. Marks : 25 Marks **Time : 25 Minutes**

Mark Schemes

Q1.

(a) the same distance as the lift

1

(b) it decreases

1

(c) $E = 1300 \times 9.8 \times 4.0$

1

$E = 50960$ (J)

allow 51000 (J)

1

(d) kinetic

1

internal

1

this order only

(e) the distance moved by the lift

1

the weight of the people in the lift

1

(f) $E_e = 0.5 \times 880\,000 \times 0.015^2$

1

$E_e = 99$ (J)

1

(g) less energy is transferred

1

[11]

Q2.

(a) $\Delta\theta = \frac{7.5}{30}$

1

$\Delta\theta = 0.25$ (°C)

1

(b) bar Y drawn to 16 **and** bar Z drawn to 12

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allow ± half a small square

1

y-axis labelled 'temperature in °C'

unit must be present

1

(c) Y

1

because it showed the smallest change in temperature

reason only scores if Y is chosen

1

(d) less than 12.0 °C

1

(e) $E = 0.0150 \times 334\,000$

1

$E = 5010$ (J)

1

(f) resolution

1

(g) density = $\frac{\text{mass}}{\text{volume}}$

or

$\rho = \frac{m}{V}$

1

(h) $0.300 = \frac{m}{0.186}$

1

$m = 0.300 \times 0.186$

1

$m = 0.0558$ (g)

1

[14]

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