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

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Name of the Student:_____
Max. Marks : 18 Marks **Time : 18 Minutes**

Mark Schemes

Q1.

(a) resultant force = zero
or
upward force = downward force
accept forces are balanced
accept weight for downward force
1

(b) (i) 84
*allow **1** mark for correct substitution ie 840 = m × 10*
2

(ii) 12
accept 12.02 for both marks
or
1010 ÷ their (b)(i) correctly calculated
*a resultant force of 1010 (N) gains **1** mark*
an answer 22(.02) gains 1 mark
2

m/s^2
accept m/s/s
1

[6]

Q2.

(a) energy required to raise the temperature of a substance by 1 °C
accept heat for energy
1

unit mass / 1 kg
1

(b) (i) 7 140 000 (J)
allow 2 marks for a correct substitution, ie
E = 20 × 420 × 850
provided no subsequent step
*850 gains **1** mark if no other mark awarded*
3

(ii) particles in the air have more (kinetic) energy than the particles in the steel
allow particles in the air have a greater speed.

1

steel
particles vibrate (about fixed positions)

1

air
particles move freely

1

(ii) the most energetic particles
accept molecules for particles throughout
accept the fastest particles

1

have enough energy to escape from (the surface of) the water

1

therefore the mean energy of the remaining particles decreases
accept speed for energy

1

as energy decreased, temperature has decreased

1

[12]