Practice Question Set For GCSE
**Subject : Physics**
**Paper-1 Topic: GCSE Triple Science_Particle Model Of Matter (Standard Demand Questions)**

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

Mark Schemes

## Q1.

(a) **solid**
particles vibrate about fixed positions
**1**

closely packed
*accept regular*
**1**

**gas**
particles move randomly
*accept particles move faster*
*accept freely for randomly*
**1**

far apart
**1**

(b) amount of energy required to change the state of a substance from liquid to gas (vapour)
**1**

unit mass / 1 kg
*dependent on first marking point*
**1**

(c) 41000 **or** $4.1 \times 10^4$ (J)
*accept*
*41400 or* $4.14 \times 10^4$
*correct substitution of*
$0.018 \times 2.3 \times 10^6$ *gains* ***1*** *mark*
**2**

(d) **AB**
changing state from solid to liquid / melting
**1**

at steady temperature
*dependent on first* ***AB*** *mark*
**1**

**BC**
temperature of liquid rises
**1**

until it reaches boiling point

*dependent on first **BC** mark*

**1**

**[12]**

## Q2.

(a) infrared / IR

*correct answer only*

**1**

(b) any **two** from:

- increase the power / watts
  *allow increase the temperature of the oven or make the oven hotter*
- decrease the speed
  *allow leave the biscuits in for longer*
- put biscuits through again
  *increase radiation is insufficient*
  *ignore changes to the design of the oven*

**2**

(c) (inside) surface is a (good) reflector or poor absorber (of IR)

*Ignore bounce for reflect*
*surface is a (good) reflector of light does not score*
*surface is a (good) reflector of light and infrared / heat does score*

**1**

(and) <u>outside</u> surface is poor emitter (of IR)

**1**

(so) increases the energy reaching the biscuits

*allow reduces energy loss or makes oven more efficient*
*do **not** accept no energy losses*
*keeps oven hotter is insufficient*

**1**

**[6]**