

# Changes of Heat, Specific Latent Heat

## Mark Scheme

Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Physics
Exam Board	AQA
Topic	6.3 Particle Model of Matter
Sub-Topic	Changes of Heat, Specific Latent heat
Difficulty Level	Silver Level
Booklet	Mark Scheme

Time Allowed: 12 minutes

Score: /12

Percentage: /100

Grade Boundaries:

- M1.(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]