

Chem Measure; Con Mass + Quant Interp Eq

Mark Scheme

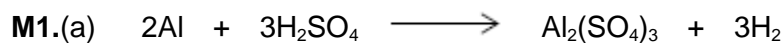
Level	GCSE (9-1)
Subject	Combined Science: Trilogy - Chemistry
Exam Board	AQA
Topic	5.3 Quantitative Chemistry
Sub-Topic	Chem Measure; Con Mass + Quant Interp Eq
Difficulty Level	Bronze Level
Booklet	Mark Scheme

Time Allowed: 36 minutes

Score: /36

Percentage: /100

Grade Boundaries:



formulae correct

1

balancing correct

1

(b) $40 + 2(14 + (3 \times 16))$

1

$= 164$

allow 164 with no working shown for 2 marks

1

(c) $(17.4 + 17.6 + 16.9) / 3$

1

$= 17.3$

allow 17.3 with no working shown for 2 marks

1

[6]

M2.(a) 1

must be in this order

1

very small

accept negligible, 1 / 2000

allow zero

1

(b) The mass number

1

(c) C

1

(d) (i) 2

1

(ii) 3

1

(e)	(i)	28	1
	(ii)	42.9 <i>accept ecf from (e)(i)</i> <i>accept 42 - 43</i>	1
(f)	(i)	0.9	1
	(ii)	any one from: <ul style="list-style-type: none">• accurate• sensitive• rapid• small sample.	1
			[10]
M3.(a)		1 / one	1
(b)	(i)	protons	1
	(ii)	neutrons	1
	(iii)	7	1
(c)	(i)	losing	1
	(ii)	a positive	1

	(iii)	electrostatic	1
	(d)	high melting points	1
		strong bonds	1
	(e)	(i) 58.5	1
		(ii) mole	1
	(f)	very small (particles) or <i>ignore tiny / small / smaller / microscopic etc.</i> 1-100nm in size or (particle with a) few hundred atoms	1
			[12]
M4.	(a)	(i) 48	1
		(ii) 3	1

(b) heat / energy

1

given out / transfers to surroundings

*the mark for given out / transfers to cannot be awarded
without heat / energy*

allow given off

1

(c) it has a low boiling point

1

it is made of small molecules

1

[6]

M5. (a) 56g

for 1 mark

1

(b) 44 tonnes

for 1 mark

1

[2]