

## Mark schemes

**Q1.**

$$\frac{180}{3000} \text{ or } \frac{18}{300}$$

or 1kg = 1000g seen or implied

*oe fraction*

*eg 3000 or 0.18 seen*

**B1**

$$\frac{3}{50}$$

**B1ft**

**[2]**

**Q2.**

(a) C

*Accept 80*

**B1**

(b) B

*Accept 22*

**B1**

(c) C

*Accept 30*

**B1**

**[3]**

**Q3.**

**Alternative method 1**

Three whole numbers that each are less than 80 and have units digit 4

or

States that each number must have units digit 4

**M1**

82

**A1**

**Alternative method 2**

Correctly evaluated trial for three whole numbers, none of which are a multiple of 10, and that, when rounded, total 70

*eg 33 + 33 + 13 = 79*

**M1**

82

**A1**

**Additional Guidance**

$$39 + 33 + 13 = 85 \quad (40 + 30 + 10 = 80)$$

M0

Beware 82 from incorrect values, e.g.  $39 + 24 + 19 = 82$

M0A0

Ignore incorrectly evaluated trials that do not solely lead to the answer

[2]

#### Q4.

(a) 680

B1

(b) 1.6(00)

oe eg  $1\frac{3}{5}$

B1

[2]

#### Q5.

(a)  $120 \div 8 (\times 5) (= 15)$

or

$$120 \div 1.6$$

or

$$120 \times 0.625$$

oe

or Complete build-up method (allow one arithmetic slip), eg

$8 \rightarrow 5, 16 \rightarrow 10, 24 \rightarrow 15, \dots 120 \rightarrow 75$

Allow part build-up method if clear, eg

Build-up to  $40 \rightarrow 25$  then  $25 \times 3$

M1

75

A1

(b)  $48 \times 0.22$

M1

10.56

Accept 10.6 if correct working seen

A1

**Allow these alternatives**

$$48 \div 4.5$$

$$48 \div 4.55$$

M1

$$[10.6, 10.7]$$

$$[10.5, 10.55]$$

A1

(c) 15 min or  $\frac{1}{4}$  hour or 0.25 hours

B1 15 or  $\frac{1}{4}$  or 0.25

B2  
[6]

**Q6.**

100 grams

B1

2 litres

B1

5 metres

B1

[3]

**Q7.**

[4.6, 5.0]

*B1 3 (× 1.6)  
or  
their 3 × 1.6 evaluated*

B2

[2]

**Q8.**

capacity

B1

[1]

**Q9.**

(a) Kilograms

*Allow kg*

B1

(b) Grams

*Allow g*

B1

(c) Litres

*Allow l*

B1

[3]

**Q10.**

cm<sup>3</sup> and cubic metres

B1

[1]

**Q11.**

Centimetres

B1

Litres	B1	
Grams	B1	[3]

**Q12.**

**Alternative method 1**

4.5 litres = 1 gallon seen or implied B1

27 ÷ their 4.5 or 6 M1

their 6 × 36 or 216 M1dep

216 and yes A1

**Alternative method 2**

4.5 litres = 1 gallon seen or implied B1

36 ÷ their 4.5 or 8  
or 210 ÷ 27 or 7.7(...) M1

their 8 × 27 or 216  
or 36 ÷ their 4.5 or 8 and 210 ÷ 27 or 7.7(...) M1dep

216 and yes  
or 7.7(...) and 8 and yes A1

**Alternative method 3**

4.5 litres = 1 gallon seen or implied B1

210 ÷ 36 or  $5.\overset{\cdot}{8}\overset{\cdot}{3}$  M1

their  $5.\overset{\cdot}{8}\overset{\cdot}{3}$  × their 4.5 or 26.25 M1dep

26.25 and yes A1

**Alternative method 4**

4.5 litres = 1 gallon seen or implied B1

27 ÷ their 4.5 or 6

or  $210 \div 36$  or  $5.\dot{8}\dot{3}$

M1

27 ÷ their 4.5 or 6

and  $210 \div 36$  or  $5.\dot{8}\dot{3}$

M1dep

6 and  $5.\dot{8}\dot{3}$  and yes

A1

### Additional Guidance

Must clearly state their conversion

[4]