M1.

Alternative method 1

£2 £2, 20p, 20p, 20p
or £2, £2, 50p, 5p, 5p
or £2, £1, £1, 50p, 10p

M1

£1, £1, 50p, 10p, 10p
or £2, 20p, 20p, 20p, 10p
or £2, 50p, 10p, 5p, 5p

M1

£2, £2, 20p, 20p, 20p, 10p

M1

£4.70

Correct money notation

A1

Alternative method 2

4.60 – 2.70 or 1.90

oe

M1

£2 and 10p identified

M1

£4.60 + 10p
or £2.70 + £2

Allow mixed units

M1

£4.70

Correct money notation

A1

[4]

M2.

(a) 1000 ÷ 42 or 23.8(...) or $23\frac{17}{21}$

or $\frac{500}{21}$

M1

23

A1

(b) 34

ft their answer to (a)

B1ft

[3]

M3.

7500 – 1875 or 5625

M1

their 5625 ÷ 36

M1

156.25

A1

[3]

M4.

Alternative method 1

300 × 0.19 or 57

oe

300 × 19 or 5700

M1

$\frac{5}{100} \times$ their 57 or 2.85

or 1.05 seen

oe

$\frac{5}{100} \times$ their 5700 or 285

or 1.05 seen

M1dep

their 57 + their 2.85

or their 57 × 1.05

their 5700 + their 285
or their 5700 × 1.05 or 5985

M1dep

59.85

A1

Alternative method 2

$\frac{5}{100} \times 0.19$

or 0.0095

or 1.05 seen

oe

$\frac{5}{100} \times 19$

or 0.95
or 1.05 seen

M1

their 0.0095 + 0.19

or 1.05 × 0.19

or 0.1995

oe
their 0.95 + 19
or 1.05 × 19
or 19.95

M1dep

their 0.1995 × 300

their 19.95 × 300 or 5985
or 1.05 × 19 × 3

M1dep

59.85

A1

Alternative method 3

$\frac{5}{100} \times 300$

or 15

or 1.05 seen

oe

M1

their 15 + 300

or 1.05 × 300

or 315

oe

M1dep

their 0.19 × their 315

19 × their 315 or 5985

M1dep

59.85

A1

Additional Guidance

Pick out any correct step, e.g.

300 ÷ 19 × 1.05

M1M1M0A0

300 × 0.5 × 0.19

M1M0M0A0

Beware, 10% of 19 = 1.90, 5% of 19 = 0.95, 1.90 + 0.95 = 2.85 (Alt 2)

M1M0M0A0

If a choice of methods is seen, mark the best

[4]

M5.(a) 46

B1

(b) 1.5 seen or implied

or 14 seen

oe

B1

28 × 1.5

or 28 + 14

Attempt to multiply speed by time
eg 28 × 1.3 or 36.4
or 90 × 28 or 2520
or 130 × 28 or 3640

M1

42

A1

[4]

M6.(a) Kilogram(s), Tonne(s), Ton(s) or Stone(s)

Accept T, kg
Ignore any numerical estimate alongside correct unit eg accept 2 tonnes

B1

(b) Centimetre(s), millimetre(s) or inch(es)

Accept cm, mm or in
Ignore any numerical estimate alongside correct unit eg accept 15 mm

B1

[2]

M7.(a) 400 ÷ 2 or 400 – 200 or 200

or 400 ÷ 4 or 400 – 200 – 100

or 400 – 300 or 100

or 400 ÷ 8

or 400 – 200 – 100 – 50

or 400 – 350

oe
One correct step
Working may be on diagram

M1

50

A1

Additional Guidance

400 – 100 – 100 – 100 = 100 is M0 A0

100 as final answer with no working shown is M0 A0

(b) 400 × 2 × 2 or 400 × 4 or 800 × 2

or 400 × 4

or 1600

or 0.4

oe

M1

1.6

SC1 for a correct conversion for their 1600

A1

Additional Guidance

1200 ml = 1.2 l is SC1

1000 ml = 1 l with 1 on answer line is M1 A0

1 l = 1000 ml alone is M0 A0

[4]

M8. 2.85 × 0.72 × 0.9

oe

285 × 72 × 90

M1

1.8(468)

1 846 800

A1

m^3

cm3

B1

Additional Guidance

Accept any rounding to 2 sf or more without working seen,
eg 1.85 or 1 850 00

[3]

M9. 5 miles = 8 km seen or implied

oe

B1

95 × their $\frac{5}{8}$

60 × their $\frac{8}{5}$

M1

59.(...) and yes

96 and yes

A1

Alternative Method 1

95 × 5 or 475

or 95 ÷ 8 or 11.875

60 × 8 or 480
or 60 ÷ 5 or 12

B1

95 × 5 ÷ 8

60 × 8 ÷ 5

M1

59.(...) and yes

96 and yes

A1

Alternative Method 2

95 × 5 or 475

or 60 × 8 or 480

95 ÷ 8 or 11.875
or 60 ÷ 5 or 12

B1

95 × 5 or 475

and 60 × 8 or 480

95 ÷ 8 or 11.875
and 60 ÷ 5 or 12

M1

475 and 480 and yes

11.875 and 12 and yes

A1

Alternative Method 3

95 ÷ 60 or 1.5...

or 8 ÷ 5 or 1.6

60 ÷ 95 or 0.63...
or 5 ÷ 8 or 0.62(5)

B1

95 ÷ 60 or 1.5...

and 8 ÷ 5 or 1.6

60 ÷ 95 or 0.63...
and 5 ÷ 8 or 0.62(5)

M1

1.5... and 1.6 and yes

0.63... and 0.625 and yes

A1

Additional Guidance

On alternative method 2 or 3, 11.875 can be 11.8(...) or 11.9

Throughout all methods students can use 2.5 and 4 in place of 5 and 8 for the first B1 (or 1.25 and 2, 10 and 16, etc – might be on the scale)

[3]

M10.

(a) (i) 1014

Accept 0945 (from Newcastle)

B1

(ii) 34

B1

(b) 12 + 10 + 7 or 29

M1

61 - their 29 (= 32)

M1

Attempt to build up to 32

Adding 12's,10's,7's with at least one total between 26 and 36

M1

2, 3, 1

Allow Adults £12, £12, Child £10, £10, £10, Senior £7
SC3 for £24, £30, £7

A1

Alternative
Multiples of 12, 10 or 7 seen

M1

Any combination of multiples of 12, 10 and 7

M1

Combination of multiples of 12, 10 or 7 with a total between 55 and 65

M1

2, 3, 1

Allow Adults £12, £12, Child £10, £10, £10, Senior £7
SC3 for £24, £30, £7

A1

[6]

M11.(a) 20(p)

Accept £ 0.20(p)

B1

(b) 10 × (25 – their 20)

or 10 × 25 – 10 × their 20 *oe*

ft their 20 from (a) if < 25

M1

50(p)

Accept £ 0.50(p)

A1 ft

[3]

M12.(a) 2 × 2(.00) + 1.25 *oe*

M1

5.25

A1

(b) 10 – their 5.25

M1

4.75

ft their 5.25

A1 ft

[4]

M13.80 + 45 + 70

200 – (80 + 45 + 70)

0.8 + 0.45 + 0.7

2 –(0.8 + 0.45 + 0.7)

M1

195

5

Yes and 195 (< 200)

1.95

0.05

Yes and 1.95 (< 2)

A1

Yes and 5 (left over) or Yes and 0.05
Strand (iii)

M1 awarded and correct decision for their total
SC1 for any correct conversion
eg 2 metres = 200 cm
or 80 cm = 0.8 metres
or 45 cm = 0.45 metres
or 70 cm = 0.7 metres

Q1 ft

[3]

M14.(a) South

Accept S

B1

(b) Plymouth

B1

(c) Alderney

B1

[3]

M15.2.2 pounds = 1000 grams seen or implied

May be implied from working
1 ÷ 2.2 (= 0.45 kg) (= 1 pound)

M1

(1 pound =) 1000 ÷ 2.2
(= 454 ... grams)

(1 gram =) 2.2 ÷ 1000 (= 0.0022 pound)

or 1 ÷ 2.2 × 1000

1 ÷ 2.2 × 0.5 (= 0.227 ... grams)

[454, 455] or 450

[0.227, 0.2275] or 0.225 or 0.230

M1

($\frac{1}{2}$ pound =) 1000 ÷ 2.2 ÷ 2

100 grams = 2.2 ÷ 1000 × 100
(= 0.22 pounds)

(= 227.2 ... grams)

or 200 grams = 2.2 ÷ 1000 × 200(= 0.44 pounds)

[227, 227.5] or 225 or 230

or 250 grams = 2.2 ÷ 1000 × 250
(= 0.55 pounds)
or 500 grams = 2.2 ÷ 1000 × 500
(= 1.1 pounds)

M1

[227, 227.5] or 225 or 230 and 250 g stated

0.55 (pounds) and 250 g stated
0.44 (pounds) and 250 g stated SC3
for e.g. 0.227 and 250 g stated

A1

Alternative method

2 pounds = 1000 grams seen or implied

May be implied from working
1 ÷ 2 (= 0.5 kg) (= 1 pound)

M1

(1 pound =) 1000 ÷ 2
(= 500 grams)

(1 gram =) 2 ÷ 1000 (= 0.002 pound)

or 1 ÷ 2 × 1000
(= 500 grams)

1 ÷ 2 × 0.5 (= 0.25 grams)

M1

($\frac{1}{2}$ pound =) 1000 ÷ 2 ÷ 2
(= 250 grams)

100 grams = 2 ÷ 1000 × 100 (= 0.2 pounds)
or 200 grams = 2 ÷ 1000 × 200 (= 0.4 pounds)

or 250 grams = 2 ÷ 1000 × 250 (= 0.5 pounds)
or 500 grams = 2 ÷ 1000 × 500 (= 1 pound)

M1

250 g stated

SC3 for e.g. 0.25 and 250 g stated

A1

[4]