Answers

Monday

Green Part 1:

1a. 9km = 900m corrected to 9km = 9,000m.
3,000g = 30kg corrected to 3,000g = 3kg or 30,000g = 30kg.
2a. False, True, True, True.
3a. 3kg < 4,000g, 3,000 > 2kg, 80km = 80,000m, 4,000m > 2km
4a. 8,000m

1b. 4,000m = 40km corrected to 4,000m = 4km or 40,000m = 40km.
80kg = 8,000g corrected to 80kg = 80,000g or 8kg = 8,000g.
2b. False, False, True, False
3b. 4kg > 2,000g, 90kg = 90,000g, 8,000m > 6km, 6km < 7,000m
4b. 3kg

Part 2 and Extension:

1a. 3,000g, 1,000g
2a. Various possible answers, for example: 60kg > 7,000g, 7,000g > 2,000g, 2,000g < 60kg
3a. Beth is correct. 2 packs of strawberries weigh 1,000g. 1,000g is equivalent to 1kg. 1kg of strawberries cost £4.00.

1b. 40,000m, 10,000m
2b. 2kg = 2,000g, 5,000g > 2kg, 5,000g > 2,000g
3b. Jack is not correct. 4 x 500g = 2,000g. 2,000g is equivalent to 2kg. 2 x £3 = £6 so 4 bunches of bananas would cost £6.00

Pink Part 1:

5a. 700m = 7.0km corrected to 700m = 0.7km or 7,000m = 7.0km.
2.7kg = 27,000g corrected to 2.7kg = 2,700g or 27kg = 27,000g.
6a. True, True, False, False.
7a. 3.5kg < 5,500g, 31,000g > 27kg, 9.8km > 9,700m, 4,200m = 4.2km.
8a. 700g.

5b. 4,900m = 49km corrected to 4,900m = 4.9km or 49,000 = 49km.
20,200m = 2.0km corrected to 20,200m = 20.2km or 2,000m = 2.0km
6b. True, False, True, False.
7b. 3.4kg > 3,300g, 9.9kg = 9,900g, 800m > 0.6km, 6.7km < 7,600m
8b. 5,300m.

Part 2 and Extension:

4a. First row: 1.6km
Second row: 4.3km
Third row: 0.2km
5a. Various possible answers, for example: 3,300m > 2,800m, 2,800m > 2.5km, 2.5km < 3,300m
6a. Nadia is correct. 1,500g is equivalent to 1.5kg. 1 kg costs £2.60 so 0.5kg would cost £1.30. £2.60 + £1.30 = £3.90.

4b. First row: 0.5kg
Second row: 2.5kg
Third row: 2.3kg
5b. Various possible answers, for example: 3.9kg > 3.3kg, 3.3kg < 3,500g, 3,500 < 3.9kg.
6b. Ewan is not correct.
3 x 500g = 1,500g, which is equivalent to 1.5kg. 1.5 x £2.80 = £4.20.

Purple Part 1:

9a. 3,500m = 3.05km corrected to 3,500m = 3.5km or 3,050km = 3.05km.
0.43kg = 4,300g corrected to 0.43kg = 430g or 4.3kg = 4,300g.
10a. False, False, True, True.
11a. 6.78kg < 9,850g, 7,430m > 2.73km, 9,800m > 8.08km, 260m = 0.26km.
12a. 0.11km.

9b. 4,970m = 49.7km corrected to 4,970m = 4.97km or 49,700m = 49.7km.
30,300m = 33km corrected to 30,300m = 30.3km or 33,000m =33km.
10b. True, False, True, True.
11b. 4.42km > 3,320m, 0.95km = 950m, 720g > 0.71kg, 2.37kg < 5,670g.
12b. 3,700g.

Part 2 and Extension:

7a. First row: 3.09km
Second row: 4.85km
Third row: 1.15km
8a. Various possible answers, for example: 4,500g > 4.05kg, 4,500g > 4,320g, 4,320g > 4.05kg
9a. Ruby is not correct.
20 apples would weigh 20 x 105g = 2,100g, which is equivalent to 2.1kg. 2kg of apples would cost 2 x £1.60 = £3.20 so 2.1kg would cost more than £3.20.

7b. First row: 4.74kg
Second row: 2.31kg
Third row: 6.15kg
8b. Various possible answers, for example: 3.7kg > 3.07kg, 3.7kg > 3,007g, 3.07kg > 3,007g
9b. Harrison is not correct.
10 pears would weigh 10 x 252g = 2,520g, which is equivalent to 2.52kg. 2.5kg would cost 2.5 x £1.90 = £4.75 so 2.52kg would cost more than £4.75.

Tuesday

Green Part 1:

1a. multiply, 5,000mm; divide, 3L; multiply, 7,000ml

2a.

mm	m
2,000	2
4,000	4
8,000	8
3,000	3

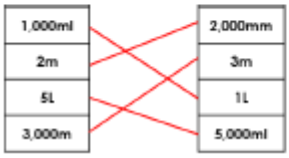
1b. multiply, 9,000ml; divide, 3m; divide, 8L

2b.

ml	L
3,000	3
7,000	7
6,000	6
10,000	10

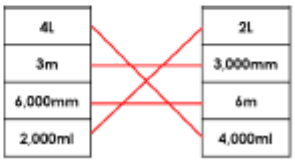
3a. 6,000mm; 5,000mm; 3m; 2,000mm; 1m

4a.



3b. 2,000mm; 3m; 5m; 8,000mm; 9,000mm

4b.



Part 2 and Extension:

1a. 2,000mm + 3m = 5m

2a. No, 5,000ml ÷ 1,000 = 5L. 5L is less than 55L.

3a. No, Kit is incorrect because he has 6,000ml of water (4,000ml + 2,000ml). Billy has 4L (3L + 1L). 4L x 1,000 = 4,000ml of water. 6,000ml is more than 4,000ml.

1b. 2L + 4,000ml = 6L

2b. Yes, 6m x 1,000 = 6,000mm. 6,000mm is greater than 5,000mm.

3b. Yes, Jess is correct because Phoebe has 7L of water (4L + 3L). Jess has 6,000ml (5,000ml + 1,000ml). 6,000ml ÷ 1,000 = 6L of water. 6L is less than 7L.

Pink Part 1:

5a. multiply, 2,300mm; divide, 3.2L; multiply, 5,700ml

6a.

$\frac{?}{1000}$	ml	L
$\frac{300}{1000}$	300	0.3
$\frac{900}{1000}$	900	0.9
$\frac{600}{1000}$	600	0.6

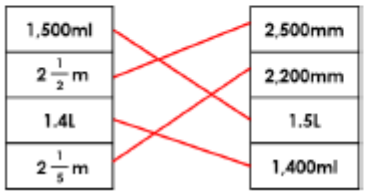
5b. divide, 4.1L; multiply, 7,500mm; multiply, 9,400ml

6b.

$\frac{?}{1000}$	ml	L
$\frac{200}{1000}$	200	0.2
$\frac{400}{1000}$	400	0.4
$\frac{800}{1000}$	800	0.8

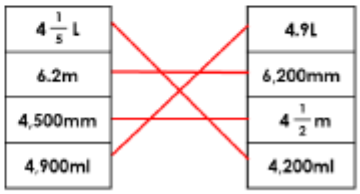
7a. 4.2m; 4,100mm; 4m; 400mm; 0.3m

8a.



7b. 0.5L; 750ml; 7.5L; 8L; 8,800ml

8b.



Part 2 and Extension:

4a. 2,500mm + 0.3m + 1,500mm = 4.3m

5a. No, $\frac{50}{1000}$ L = 50ml < 0.5L.
0.5L x 1,000 = 500ml. 500ml is more than 50ml.

6a. No, Jack is incorrect because he has 3,000ml (4,600ml ÷ 2 and 2,300ml + 700ml). Peter has 3,100ml (5.2L ÷ 2 and 2.6L + 500ml). Peter has 100ml of water more than Jack.

4b. 0.5L + 3,700ml + 1,500ml = 5.7L

5b. No, $\frac{900}{1000}$ L = 900ml = 0.9L.
0.9L x 1,000 = 900ml, so all are equal.

6b. Yes, Lily is correct because Brooke has 1,900ml (2,800ml ÷ 2 and 1,400ml + 500ml). Lily has 800ml (1.2L ÷ 2 and 0.6L + 200ml). Lily has 1,100ml of water less than Brooke.

Purple Part 1:

9a. multiply, 2,340mm; divide, 4.01L; multiply, 5,770ml

10a.

$\frac{?}{1000}$	ml	L
$\frac{350}{1000}$	350	0.35
$\frac{590}{1000}$	590	0.59
$\frac{710}{1000}$	710	0.71

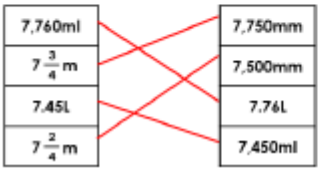
9b. multiply, 4,180ml; divide, 7.04m; multiply, 9,490ml

10b.

$\frac{?}{1000}$	ml	L
$\frac{750}{1000}$	750	0.75
$\frac{60}{1000}$	60	0.06
$\frac{950}{1000}$	950	0.95

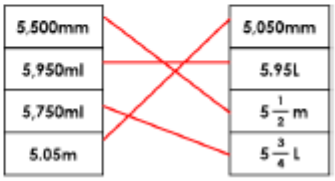
11a. 4.36m, 4.26m, 460mm, 426mm, 0.29m

12a.



11b. 760ml, 0.86L, 7.6L, 8,610ml, 8.76L

12b.



Part 2 and Extension:

7a. 5,000mm + 0.02m + $1\frac{1}{4}$m = 6.27m

8a. No, 0.06L x 1,000 = 60ml. $\frac{600}{1000}$ L = 600ml. 60ml is not greater than 600ml.

9a. No, Logan is incorrect because he has 3,500ml (5,500ml ÷ 2 and 2,750ml + 750ml). Noah has 2,750ml (two thirds of 3L is 2L and 2L + 750ml). Logan has 750ml of water more than Noah.

7b. $2\frac{3}{4}$L + 1.75L + 1,250ml = 5.75L

8b. Yes, 0.15L x 1,000 =150ml. $\frac{15}{1000}$ L = 15ml. 150ml is greater than 15ml.

9b. Yes, Olivia is correct because Ava has 2,350ml (6.3L ÷ 3 and 2.1L + 250ml). Olivia has 2,350ml (3,800ml ÷ 2 and 1,900ml + 450ml). They each have 2,350ml of water in their buckets.

Wednesday

Green Part 1:

1a. 360 seconds = 6 minutes;
600 seconds = 10 minutes
2a. False: 28 days > 3 weeks
3a. A
4a. 60 minutes, 2 hours, 180 minutes, 4 hours

1b. 21 days = 3 weeks;
35 days = 5 weeks
2b. False: 600 minutes = 10 hours
3b. A
4b. 6 years, 60 months, 4 years, 36 months

Part 2 and Extension:

1a. 300 seconds > 4 minutes
2a. No, Mia is incorrect. There are 7 days in 1 week. 70 ÷ 7 = 10 so 70 days = 10 weeks. 7 x 7 = 49 so 7 weeks = 49 days.
3a. Lee is the youngest at 84 months.

1b. 48 months < 5 years
2b. Yes, Zairah is correct. There are 60 seconds in 1 minute. 3 x 60 = 180 so there are 180 seconds in 3 minutes.
3b. Leticia has the longest nap at 240 minutes.

Pink Part 1:

5a. 132 minutes = 2 hours 12 minutes;
90 minutes = 1 hour 30 minutes;
188 minutes = 3 hours 8 minutes
6a. False: 4 years 6 months = 54 months
7a. A
8a. 610 seconds, 10 minutes 20 seconds, 10 minutes 30 seconds, 650 seconds

5b. 100 days = 14 weeks 2 days;
93 days = 13 weeks 2 days;
85 days = 12 weeks 1 day
6b. False: 330 seconds = 5 minutes and 30 seconds
7b. A
8b. 146 minutes, 1 hour 56 minutes, 1 hour 45 minutes, 85 minutes

Part 2 and Extension:

4a. 72 minutes > 3,780 seconds < 3,900 seconds
3,780 seconds < 72 minutes > 3,900 seconds
3,900 seconds < 72 minutes > 3,780 seconds
3,900 seconds > 3,780 seconds < 72 minutes
5a. No, Joe is incorrect. There are 7 days in 1 week. 13 x 7 = 91 so 91 days = 13 weeks. 80 days = 11 weeks, 3 days
6a. Chloe makes her craft the quickest, in 1 hour and 55 minutes

4b. 55 months < 66 months = 5 years 6 months
55 months < 5 years 6 months = 66 months
5b. No, Ravi is incorrect. There are 24 hours in 1 day therefore Lily is going to the beach in 1 day and 11 hours. 3 x 24 = 72 and 72 + 5 = 77 so 3 days and 5 hours = 77 hours.
6b. Aamina finishes the race last as she takes 270 seconds.

Purple Part 1:

9a. 3,600 seconds = 1 hour; 1,800 seconds = 0.5 hours; 5,400 seconds = 1.5 hours; 2,700 seconds = 0.75 hours
10a. True
11a. A
12a. 0.75 hours, 4,500 seconds, 98 minutes, 100 minutes, 6,060 seconds, 2.5 hours

9b. 120 hours = 5 days; 96 hours = 4 days; 144 hours = 6 days; 240 hours = 10 days
10b. True
11b. C
12b. 60 months, 48 months, 156 weeks, 144 weeks, 2 years, 18 months

Part 2 and Extension:

7a. Various possible answers: for example,
1.75 hours = 105 minutes < 9,000 seconds > 2 hours
105 minutes = 1.75 hours < 9,000 seconds > 2 hours
9,000 seconds > 1.75 hours = 105 minutes < 2 hours
2 hours > 1.75 hours = 105 minutes < 9,000 seconds
8a. Yes, Ellie is correct. There are 52 weeks in 1 year and 4 x 52 = 208
9a. Ellis is going on the shortest holiday as he is only away for 10 days.

7b. Various possible answers: for example,
192 hours = 8 days > 1,440 minutes < 7 days
8 days = 192 hours > 1,440 minutes < 7 days
1,440 minutes < 192 hours = 8 days > 7 days
7 days > 1,440 minutes < 192 hours = 8 days
8b. Yes, Oscar is correct. There are 60 minutes in 1 hour. 3 x 60 = 180. There are 60 seconds per minute so 180 x 60 = 10,800
9b. Lexi has trained for the shortest time as 156 weeks = 3 years.

Thursday

Green:

1. A. 266; B. 28; C. 2; D. 60
2. A. 28 days or 3 weeks; C. 98 days or 13 weeks; F. 960 minutes or 14 hours
3. Sophia = 25th May; Clive = 2:30pm

Math Week 9 Answers

Pink:

4. A. 40 B. 5; C. 440; D. 365, E. 20, F. 20
5. Various possible answers due to partitioning of units:
A. 2 years and 6 months or 36 months; D. 1 hour and 40 minutes or 110 minutes; F. 7 hours and 10 minutes or 6 hours and 70 minutes or 390 minutes
6.Kane = 25th October; Rebecca = 8:08pm; Lee = 17th September; Zac = 9:30am Wednesday

Purple:

7. A. 225; B. 8784; C. 71; D. 15,120; E. 9,000; F. 502.5
8. Various possible answers due to partitioning of units: B. 120 hours and 360 minutes or 5.125 days; D. 480 minutes or 8 hours and 1200 seconds; E. 5 hours and 1,530 seconds or 302.5 minutes
9. Cliff = 13th August 01:30, Huma = 21:11:00, Beth = 13th March 02:31, Randol = 12:56:54