

**CHAPTER 7 Units**

Calculators are not necessary for this chapter.

**EXERCISE 7a (p. 108)**

A good opportunity to point out the importance of eyes being directly over each end of a line when using a ruler to measure its length.

1. a) metres b) centimetres c) metres d) kilometres e) centimetres f) millimetres
3. a) 4 b) 2 c) 5 d) 1 e) 10
4. (to the nearest millimetre) a) 20 b) 10 c) 4 d) 16 e) 24
9. 40cm                      10. 900cm

**EXERCISE 7b (p. 110)**

- |           |               |          |             |          |
|-----------|---------------|----------|-------------|----------|
| 1. 200    | 6. 150        | 11. 500  | 16. 3700    | 21. 38   |
| 2. 5000   | 7. 6000       | 12. 7000 | 17. 1900    | 22. 9200 |
| 3. 30     | 8. 100 000    | 13. 150  | 18. 3500    | 23. 2300 |
| 4. 400    | 9. 3000       | 14. 23   | 19. 270     | 24. 840  |
| 5. 12 000 | 10. 2 000 000 | 15. 4600 | 20. 190 000 |          |

**EXERCISE 7c (p. 111)**

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|--------------|---------------|----------|---------------|-------------|
| 1. 12 000    | 6. 13 000     | 11. 3000 | 16. 700       | 21. 7300    |
| 2. 3000      | 7. 6000       | 12. 4000 | 17. 5 200 000 | 22. 300 000 |
| 3. 5000      | 8. 2 000 000  | 13. 1500 | 18. 600       | 23. 500     |
| 4. 1 000 000 | 9. 4000       | 14. 2700 | 19. 11 300    | 24. 800     |
| 5. 1 000 000 | 10. 2 000 000 | 15. 1800 | 20. 2500      |             |

**EXERCISE 7d (p. 112)**

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|---------|---------|----------|----------|----------|
| 1. 136  | 5. 207  | 9. 202   | 13. 5500 | 17. 1250 |
| 2. 35   | 6. 3020 | 10. 8009 | 14. 2800 | 18. 3550 |
| 3. 1050 | 7. 502  | 11. 3500 | 15. 3250 | 19. 2050 |
| 4. 48   | 8. 5500 | 12. 2008 | 16. 1020 | 20. 1010 |

**EXERCISE 7e (p. 112)**

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|----------|-----------|------------|---------------|-------------|
| 1. 30    | 9. 1.25   | 17. 0.56   | 25. 4.4       | 33. 9.008   |
| 2. 6     | 10. 2.85  | 18. 0.028  | 26. 5.03      | 34. 9.088   |
| 3. 1.5   | 11. 1.5   | 19. 0.19   | 27. 7.005     | 35. 12.019  |
| 4. 25    | 12. 3.68  | 20. 0.086  | 28. 4.005     | 36. 4.111   |
| 5. 1.6   | 13. 1.5   | 21. 3.45   | 29. 1.001     | 37. 1.056   |
| 6. 0.072 | 14. 5.02  | 22. 8.4    | 30. 0.000 085 | 38. 5.003   |
| 7. 0.12  | 15. 3.8   | 23. 11.002 | 31. 5.142     | 39. 0.2505  |
| 8. 8.8   | 16. 0.086 | 24. 2.042  | 32. 48.171    | 40. 0.85055 |

**EXERCISE 7f (p. 114)**

Worth pointing out to those of above average ability that, in the worked examples, part (b) can be obtained directly from part (a).

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|------------|----------|-------------|------------|------------|
| 1. 5.86    | 8. 55    | 15. 15 100  | 22. 1606.4 | 29. 2642   |
| 2. 1.035   | 9. 1820  | 16. 2550    | 23. 1089.6 | 30. 19 850 |
| 3. 3001.36 | 10. 2456 | 17. 1046.68 | 24. 5972   | 31. 35 420 |
| 4. 3051    | 11. 5059 | 18. 308.73  | 25. 748    | 32. 910    |
| 5. 5.647   | 12. 1358 | 19. 2580    | 26. 0.922  | 33. 448.2  |
| 6. 4.65    | 13. 3250 | 20. 2362    | 27. 1150   | 34. 5      |
| 7. 440     | 14. 5115 | 21. 2.22    | 28. 73.6   |            |

### EXERCISE 7g (p. 115)

For the above average.

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|-----------|-----------|---------|-----------|-----------|
| 1. 13 540 | 3. 13.563 | 5. 32   | 7. 15 366 | 9. 22.77  |
| 2. 45 792 | 4. 12.55  | 6. 10.6 | 8. 24.448 | 10. 16.24 |

### EXERCISE 7h (p. 116)

Those of average ability would benefit from using a calculator.

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|----------|----------|-----------|---------|-----------|
| 1. 9.72m | 3. 748kg | 5. 1080mm | 7. 2.2g | 9. 33.2cm |
| 2. 1840g | 4. 4.11g | 6. 4kg    | 8. 15m  | 10. 5.3kg |

### EXERCISE 7i (p. 117)

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|----------|-----------|----------------|----------------|-------------|
| 1. 700c  | 6. 4381c  | 11. £1.26      | 16. £2.83      | 21. £3.20   |
| 2. 600p  | 7. 1103pf | 12. \$3.50     | 17. 3.47 marks | 22. \$5.05  |
| 3. 900pf | 8. 615p   | 13. £1.90      | 18. £5.80      | 23. £9.60   |
| 4. 1300c | 9. 210p   | 14. 3.50 marks | 19. 11.09f     | 24. 6 marks |
| 5. 735c  | 10. 504p  | 15. \$43.07    | 20. £6.08      | 25. £2.80   |

### EXERCISE 7j (p. 118)

For the above average.

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|---------------------|----------------------------|
| 1. a) 98cm b) 980mm | 6. 95t 660kg; 121t 960kg   |
| 2. 2.23km           | 7. 76.9kg, 72kg            |
| 3. 9.192kg          | 8. 13 360m, 13.64km        |
| 4. 3056m, 3050m     | 9. a) 6.2, 3.8 b) 620, 380 |
| 5. 3.6m             | 10. £6.75                  |

### EXERCISE 7k (p. 119)

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|-----------|-----------|-----------|---------|------------|
| 1. 4000m  | 3. 350cm  | 5. 3000cm | 7. 1.5m | 9. 0.065kg |
| 2. 0.03kg | 4. 0.25kg | 6. 1.25km | 8. 28mm | 10. 4.29kg |

### EXERCISE 7l (p. 120)

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|----------|----------|-----------|-----------|---------|
| 1. 2.36m | 3. 5000g | 5. 4.25km | 7. 2.35kg | 9. 2.6m |
| 2. 20mm  | 4. 0.5g  | 6. 3600kg | 8. 2000mg |         |

**EXERCISE 7m (p. 120)**

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|-----------|-------------|----------|-----------|-----------|
| 1. 5780kg | 3. 0.35t    | 5. 1.56t | 7. 360mg  | 9. 8.598t |
| 2. 354p   | 4. 0.0155cm | 6. 7.80f | 8. 2.05km |           |

**EXERCISE 7n (p. 120)**

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|-----------|-------------|----------|-----------|-------|
| 1. 4.2m   | 3. £1.52    | 5. 3.6cm | 7. 0.36m  | 9. £7 |
| 2. 0.35kg | 4. 0.5283km | 6. 470mm | 8. 1.356g |       |