



## Answer Key

# GRADE 4 • MODULE 2

## Unit Conversions and Problem Solving with Metric Measurement

## Lesson 1

### Problem Set

- 1,000
  - 4,000
  - 7,000
  - 18
  - 100
  - 300
  - 8,000
  - 120
- 3,312
  - 13,027
  - 915,008
  - 356
  - 1,408
  - 12,046
- 3,720 m or 3 km 720 m
  - 81 cm
  - 14,600 m
  - 21,683 cm
  - 79,109 m or 79 km 109 m
  - 55,351 m or 55 km 351 m
- 17,037 cm or 17 m 37 cm
- 2,691 m or 2 km 691 m
- 283 cm or 2m 83 cm
- 2,379 m or 2 km 279 m

### Exit Ticket

- 71,000; 30; 8,100; 4
- 13,020
- 366,948 m or 366km 948m
- 260 cm or 2 m 60 cm

**Homework**

1.
  - a. 5,000
  - b. 13,000
  - c. 17
  - d. 60,000
  - e. 700
  - f. 1,900
  - g. 24
  - h. 9,000
2.
  - a. 7,123
  - b. 22,022
  - c. 875,004
  - d. 745
  - e. 677
  - f. 20,489
3.
  - a. 1,747 m or 1 km 747 m
  - b. 146 cm or 1 m 46 cm
  - c. 400,924 m
  - d. 64,586 cm
  - e. 177,555 m or 177 km 555 m
  - f. 717640 m or 717 km 640 m
4. 1,822 cm or 18m 22cm
5. 6,710 m or 6km 710m
6. 647 m
7. 172 cm

## Lesson 2

### Problem Set

- 3,000; 4; 17,000; 20; 300,000
- 1,500
  - 3,715
  - 17,084
  - 25,009
  - 7; 481
  - 210,090
- 2,215 g or 2 kg 215 g
  - 763 g
  - 50,000 g
  - 6,660 g
  - 10 kg 217 g
  - 63 kg 139 g
- 8,444 g or 8 kg 444 g
- 4,975 g or 4 kg 975 g
- 28,077 g or 28 kg 77 g
- 5,962 g or 5 kg 962 g

### Exit Ticket

- 21,415
  - 2,091
  - 87,017
  - 96, 20
- 57kg 671g or 57,671g

**Homework**

1. 6,000; 8; 15,000; 24; 550,000
2.
  - a. 2,700
  - b. 5,945
  - c. 29,058
  - d. 31,003
  - e. 66; 597
  - f. 270,041
3.
  - a. 450 g
  - b. 4,270 g or 4k g 270 g
  - c. 28,241 g
  - d. 18,800 g
  - e. 3 kg 874 g
  - f. 52 kg 239 g
4. 49,224 g or 49 kg 224 g
5. 3,715 g or 3 kg 715 g
6. 1,879 g or 1 kg 879 g

## Lesson 3

### Problem Set

- 5,000; 38,000; 49; 54,000; 92
- 2,500
  - 70,850
  - 33,015
  - 2,008
  - 3; 812
  - 86; 3
- 41,760 L or 41 L 760 mL
  - 3,600 mL or 3 L 600 mL
  - 29,290 mL
  - 18,992 mL
  - 6 L 878 mL
  - 18 L 557 mL
- Pineapple, ginger ale, tropical
  - 8,195 mL or 8 L 195 mL
- 1,790 mL or 1 L 790 mL
- 2,877 mL

### Exit Ticket

- 6,127
  - 706,220
  - 12,009
  - 906, 10
- 59,114 mL or 59 L 114 mL
- 970,250 mL or 970 L 250 mL

**Homework**

1. 8,000  
27,000  
39  
68,000  
102
2. a. 5,850  
b. 29,303  
c. 37,037  
d. 17,002  
e. 13; 674  
f. 275; 5
3. a. 593 mL  
b. 2,260 mL or 2 L 260 mL  
c. 28,360 mL  
d. 30,100 mL  
e. 8 L 575 mL  
f. 12 L 779 mL
4. Marie's bucket
5. 17,735 mL or 17 L 735 mL
6. 28,657 mL or 28 L 657 mL

## Lesson 4

### Pattern Sheet

- |          |           |            |            |
|----------|-----------|------------|------------|
| 1. 4, 0  | 12. 10, 7 | 23. 4, 11  | 34. 6, 10  |
| 2. 6, 0  | 13. 9, 8  | 24. 5, 12  | 35. 6, 50  |
| 3. 5, 0  | 14. 5, 8  | 25. 6, 13  | 36. 8, 0   |
| 4. 9, 0  | 15. 3, 8  | 26. 6, 23  | 37. 8, 25  |
| 5. 4, 0  | 16. 3, 10 | 27. 8, 50  | 38. 8, 40  |
| 6. 6, 0  | 17. 6, 80 | 28. 10, 50 | 39. 9, 20  |
| 7. 8, 0  | 18. 6, 90 | 29. 8, 75  | 40. 8, 10  |
| 8. 10, 0 | 19. 7, 0  | 30. 8, 50  | 41. 9, 30  |
| 9. 6, 7  | 20. 7, 10 | 31. 5, 80  | 42. 8, 63  |
| 10. 7, 7 | 21. 7, 20 | 32. 5, 90  | 43. 11, 3  |
| 11. 8, 7 | 22. 7, 50 | 33. 6, 0   | 44. 18, 22 |

### Problem Set

- Meter; kilogram; 1,000; liter; 100,000
- Ones
  - Meters
  - Thousands
  - Kilometers
  - Thousands
  - Grams
- 456,829
  - 456,829
- Explanations will vary.
- >
  - >
  - =
- Measurements plotted accurately on the number line
- Measurements plotted accurately on the number line

**Exit Ticket**

- Thousands
  - Kilograms
- 342,645
- $>$
  - $<$
  - $<$
- Measurements plotted accurately on the number line

**Homework**

- One; 1,000; kilogram; thousand; liter; 100,000
- Hundred
  - Meter
  - Thousand
  - Kilometer
  - 12
  - Grams
- 125,312
  - 125,312
- $>$
  - $<$
- 28,890 g or 28 kg 890 g
- Measurements plotted accurately on the number line
- Measurements plotted accurately on the number line

## Lesson 5

### Sprint

#### Side A

- |            |            |            |            |
|------------|------------|------------|------------|
| 1. 2, 0    | 12. 6, 101 | 23. 3, 800 | 34. 3, 400 |
| 2. 3, 0    | 13. 6, 10  | 24. 4, 770 | 35. 6, 0   |
| 3. 4, 0    | 14. 6, 11  | 25. 4, 807 | 36. 8, 0   |
| 4. 9, 0    | 15. 6, 1   | 26. 5, 65  | 37. 8, 0   |
| 5. 6, 0    | 16. 8, 2   | 27. 5, 40  | 38. 56, 0  |
| 6. 1, 0    | 17. 8, 20  | 28. 6, 7   | 39. 7, 0   |
| 7. 8, 0    | 18. 8, 200 | 29. 2, 3   | 40. 80, 0  |
| 8. 5, 0    | 19. 8, 22  | 30. 1, 90  | 41. 9, 0   |
| 9. 7, 0    | 20. 8, 220 | 31. 1, 55  | 42. 68, 0  |
| 10. 6, 100 | 21. 8, 222 | 32. 9, 404 | 43. 65, 0  |
| 11. 6, 110 | 22. 7, 256 | 33. 9, 330 | 44. 12, 0  |

#### Side B

- |            |            |            |            |
|------------|------------|------------|------------|
| 1. 1, 0    | 12. 5, 101 | 23. 2, 700 | 34. 4, 500 |
| 2. 2, 0    | 13. 5, 10  | 24. 3, 660 | 35. 5, 0   |
| 3. 3, 0    | 14. 5, 11  | 25. 3, 706 | 36. 7, 0   |
| 4. 8, 0    | 15. 5, 1   | 26. 4, 95  | 37. 9, 0   |
| 5. 6, 0    | 16. 7, 2   | 27. 4, 30  | 38. 72, 0  |
| 6. 9, 0    | 17. 7, 20  | 28. 5, 6   | 39. 8, 0   |
| 7. 4, 0    | 18. 7, 200 | 29. 3, 4   | 40. 85, 0  |
| 8. 7, 0    | 19. 7, 22  | 30. 2, 10  | 41. 9, 0   |
| 9. 5, 0    | 20. 7, 220 | 31. 2, 75  | 42. 72, 0  |
| 10. 5, 100 | 21. 7, 222 | 32. 1, 504 | 43. 70, 0  |
| 11. 5, 110 | 22. 4, 378 | 33. 1, 440 | 44. 12, 0  |

**Problem Set**

1. 5,790 g or 5 kg 790 g
2. 2,634 cm or 26 m 34 cm
3. 3,999 mL or 3 L 999 mL
4. 36,428 g or 36 kg 428 g
5. 34,125 mL or 34 L 125 mL
6. 185 cm or 1 m 85 cm

**Exit Ticket**

1. 245 g
2. 155 cm or 1 m 55 cm

**Homework**

1. 722 mL
2. 1,875 m or 1 km 875 m
3. 29,540 g or 29 kg 540 g
4. 45,066 g
5. 13 cm
6. 182,700 mL or 182 L 700 mL