



Answer Key

GRADE 3 • MODULE 6

Collecting and Displaying Data

Lesson 1

Problem Set

1. Tally chart will vary.
2. Answers will vary.
3.
 - a. Picture graphs will vary
 - b. Picture graphs will vary
4.
 - a. 2 students
 - b. 1 and half hearts drawn correctly; $2 + 1 = 3$
 - c. 14 students; $7 \times 2 = 14$
 - d. Answers will vary.

Exit Ticket

- a. Football; hockey
- b. 9
- c. 3; $12 - 9 = 3$
- d. 33

Homework

1. 22
2. Answer provided; 4 circles; 2 circles; 8 circles; 2 circles
 - a. Fish; lizards
 - b. 8
 - c. 2
3. 3 rectangles; 2 rectangles; 1 rectangle; 4 rectangles; 1 rectangle
 - a. 2 students
 - b. 10 students; $5 \times 2 = 10$
 - c. 3; $8 - 2 = 6$

Lesson 2

Problem Set

1. Answer provided; 2 units of 4 drawn; 6 units of 4 drawn; 8 units of 4 drawn
2. Answers will vary.
3.
 - a. Answer provided; 2 units of 4 drawn; 6 units of 4 drawn; 8 units of 4 drawn
 - b. Answer provided; 1 unit of 8 drawn; 3 units of 8 drawn; 4 units of 8 drawn
 - c. Answers will vary.
 - d. 20
 - e. 10
 - f. Answers will vary.
 - g. Answers will vary.

Exit Ticket

- a. 3 units of 4 drawn; 4 units of 4 drawn; 5 units of 4 drawn; 2 units of 4 drawn
- b. Answers will vary.

Homework

1. Answer provided; 8 units of 2 drawn; 6 units of 2 drawn; 2 units of 2 drawn
2. Answers will vary.
3.
 - a. Answer provided; 8 units of 2 drawn; 6 units of 2 drawn; 2 units of 2 drawn
 - b. Answer provided; 4 units of 4 drawn; 3 units of 4 drawn; 1 unit of 4 drawn
 - c. Answers will vary.
 - d. Answers will vary.
 - e. $6 \times 2 = 12$
 - f. $3 \times 4 = 12$
 - g. Number and size of units; explanations will vary.

Lesson 3

Sprint

Side A

- | | | | |
|--------|--------|--------|--------|
| 1. 12 | 12. 42 | 23. 10 | 34. 8 |
| 2. 18 | 13. 48 | 24. 2 | 35. 7 |
| 3. 24 | 14. 54 | 25. 3 | 36. 9 |
| 4. 30 | 15. 60 | 26. 10 | 37. 6 |
| 5. 6 | 16. 8 | 27. 5 | 38. 8 |
| 6. 2 | 17. 7 | 28. 1 | 39. 66 |
| 7. 3 | 18. 9 | 29. 2 | 40. 11 |
| 8. 5 | 19. 6 | 30. 3 | 41. 72 |
| 9. 1 | 20. 10 | 31. 6 | 42. 12 |
| 10. 4 | 21. 5 | 32. 7 | 43. 84 |
| 11. 36 | 22. 1 | 33. 9 | 44. 14 |

Side B

- | | | | |
|--------|--------|--------|--------|
| 1. 6 | 12. 36 | 23. 2 | 34. 7 |
| 2. 12 | 13. 42 | 24. 10 | 35. 8 |
| 3. 18 | 14. 48 | 25. 3 | 36. 9 |
| 4. 24 | 15. 54 | 26. 2 | 37. 6 |
| 5. 30 | 16. 7 | 27. 1 | 38. 7 |
| 6. 3 | 17. 6 | 28. 10 | 39. 66 |
| 7. 2 | 18. 8 | 29. 5 | 40. 11 |
| 8. 4 | 19. 10 | 30. 3 | 41. 72 |
| 9. 1 | 20. 9 | 31. 3 | 42. 12 |
| 10. 5 | 21. 1 | 32. 4 | 43. 78 |
| 11. 60 | 22. 5 | 33. 9 | 44. 13 |

Problem Set

1. Answer provided; 8 units colored; 6 and a half units colored; 9 units colored
 - a. 2
 - b. $9 + 16 + 13 + 18 = 56$
 - c. 6; $22 - 16 = 6$
2.
 - a. \$34
 - b. February, April, and May
 - c. \$17; $\$40 - \$23 = \$17$
 - d. April; March
3. February: \$30; March: \$46; April: \$23; May: \$34; June: \$40
4. Intervals drawn correctly on the number line; each day plotted and labeled correctly on number line
5.
 - a. Monday, Tuesday, and Thursday; 50 min
 - b. 30 min

Exit Ticket

- a. Intervals drawn correctly on the number line; each flavor plotted and labeled correctly on the number line
- b. $25 + 35 + 50 = 110$

Homework

1.
 - a. 14 students
 - b. 4 students; $18 - 14 = 4$
 - c. Both
2.
 - a. Week 4; Week 3
 - b. 15 liters
 - c. $50\text{L} + 40\text{L} = 90\text{L}$
 - d. 210 liters
 - e. More
3. Week 1: 55 liters; Week 2: 50 liters; Week 3: 40 liters; Week 4: 65 liters

Lesson 4

Problem Set

1.
 - a. Bar graph drawn correctly with appropriate scale
 - b. Answers will vary.
 - c. 150
 - d. 150
2.
 - a. 240
 - b. 80

Exit Ticket

- a. 530
- b. 150

Homework

1. 68; 62; 57; 24
 - a. Bar graph drawn correctly with scale labeled appropriately by 10
 - b. 11
 - c. 171; work shown correctly
2.
 - a. 5
 - b. \$118
 - c. 11

Lesson 5

Problem Set

1.
 - a. Answers will vary.
 - b. Answers will vary.
 - c. Answers will vary.
2.
 - a. Whole and half inches labeled on paper strip
 - b. 2; 4; 2
 - c. Answers will vary.
3. Explanations will vary.

Exit Ticket

- a. Whole and quarter inches labeled on paper strip
- b. Answers will vary.

Homework

1.
 - a. Red pencil; $6\frac{3}{4}$
 - b. Green pencil; explanations will vary.
2.
 - a. Whole and half inches labeled on paper strip
 - b. 2; 4; 2; 1
3. Explanations will vary.

Lesson 6

Pattern Sheet

6	12	18	24
30	6	12	6
18	6	24	6
30	6	12	18
12	24	12	30
12	6	12	18
6	18	12	18
24	18	30	18
24	6	24	12
24	18	24	30
24	30	6	30
12	30	18	30
24	12	24	18
30	18	12	24
18	30	12	24

Problem Set

- 15
 - 6
 - No, explanations will vary.
 - 4
- 30
 - No, explanations will vary.
 - Length plotted correctly on line plot

Exit Ticket

- a. 24
- b. 9
- c. Yes, explanations will vary.

Homework

- 1.
 - a. 4
 - b. 20; explanations will vary.
 - c. 9
 - d. 9
- 2.
 - a. 24
 - b. No, explanations will vary.
 - c. Yes, explanations will vary.

Lesson 7

Pattern Sheet

6	12	18	24
30	36	42	48
54	60	30	36
30	42	30	48
30	54	30	60
36	30	36	42
36	48	36	54
36	42	36	42
48	42	54	42
48	36	48	42
48	54	54	36
54	42	54	48
54	48	36	54
42	54	36	48
54	42	36	48

Problem Set

- Line plot completed; Heights of Bean Plants; inches; 1 bean plant
- 14 bean plants
- 6 bean plants
- $1\frac{3}{4}$ inches; 4
- No; explanations will vary.
- Yes; explanations will vary.

Exit Ticket

Line plot completed; Length of Mice; inches

Homework

- a. Line plot completed; Heights of Buildings; inches; 1 building
- b. 2
- c. 7
- d. 25
- e. No; explanations will vary.

Lesson 8

Pattern Sheet

7	14	21	28
35	7	14	7
21	7	28	7
35	7	14	21
14	28	14	35
14	7	14	21
7	21	14	21
28	21	35	21
28	7	28	14
28	21	28	35
28	35	7	35
14	35	21	35
28	14	28	21
35	21	14	28
21	35	14	28

Problem Set

- Line plot completed; Widths of Leaves; inches; $x = 1$ leaf
- Answers will vary.
- 4
- Explanations will vary.

Exit Ticket

- 23 inches, $23\frac{1}{4}$ inches, $23\frac{1}{2}$ inches
- 2 inches
- 3

Homework

- a. Line plot completed; Distance Traveled; inches; $x = 1$ marshmallow
- b. Answers will vary.
- c. 2
- d. Explanations will vary.

Lesson 9

Pattern Sheet

7	14	21	28
35	42	49	56
63	70	35	42
35	49	35	56
35	63	35	70
42	35	42	49
42	56	42	63
42	49	42	49
56	49	63	49
56	42	56	49
56	63	63	42
63	49	63	56
63	56	42	63
49	63	42	56
63	49	42	56

Problem Set

- 24
 - Picture graph completed; scale drawn
- 8
 - 4
- Line plot completed; explanations will vary.
 - 24; explanations will vary.
 - $2\frac{3}{4}$ inches; 6
 - 2

Exit Ticket

- a. 12
- b. 4

Homework

- 1. Picture graph completed; scale drawn
- 2.
 - a. \$90
 - b. \$36
 - c. 7
 - d. \$12