



Answer Key

GRADE 1 • MODULE 2

Introduction to Place Value Through Addition and Subtraction Within 20

Lesson 1

Problem Set

1. Answer provided; 16; 6, 16; 16
2. Drawing with 10 circled; 4, 7, 3, 14; 4, 14; 14
3. Drawing with 10 circled; 3, 2, 8, 13; 3, 13; 13
4. Drawing with 10 circled; 4, 2, 6, 12; 2, 12; 12

Exit Ticket

Drawing with 10 circled; 2, 4, 8, 14; 4, 14; 14

Homework

1. Drawing with 10 circled; 5, 6, 4, 15; 5, 15; 15
2. Drawing with 10 circled; 5, 7, 5, 17; 7, 17; 17
3. Drawing with 10 circled; 7, 6, 3, 16; 6, 16; 16
4. Drawing with 10 circled; 4, 9, 1, 14; 10, 4, 14; 14

Lesson 2

Problem Set

1. Partial answer provided; 4, 14
2. Numbers circled; picture drawn; 9, 1, 4; 4, 14
3. Numbers circled; picture drawn; 5, 5, 6; 6, 16
4. Numbers circled; picture drawn; 3, 7, 4; 4, 14
5. Numbers circled; picture drawn; 2, 8, 7; 7, 17
6. Partial answer provided; 15
7. 8 and 2 circled into a number bond; 14
8. 5 and 5 circled into a number bond; 13
9. 3 and 7 circled into a number bond; 16

Exit Ticket

- a. 8 and 2 circled; picture drawn; 13; 2, 8, 10; 3, 13
- b. 7 and 3 circled; picture drawn; 14; 3, 7, 10; 4, 14

Homework

1. Partial answer provided; 4; 2, 12
2. 5 and 5 circled; picture drawn; 10, 5, 5, 3; 3, 13
3. 2 and 8 circled; picture drawn; 10, 5, 2, 8; 5, 15
4. 7 and 3 circled; picture drawn; 10, 2, 3, 7; 2, 12
5. Partial answer provided; 15; 10, 5, 15
6. 8 and 2 circled into a number bond of 10; 14; 10, 4, 14

Challenge:

- a. Sentence circled
- b. 4, 6 circled; sentence circled
- c. 3, 7 circled
- d. 2, 8 circled; sentence circled

Lesson 3

Problem Set

1. 10 circled; 6, 15; 5, 15; 15
2. 10 circled in drawing; 4, 13; 3, 13; 13
3. 10 circled in drawing; 3, 12; 2, 12; 12
4. 10 circled in drawing; 7, 16; 6, 16; 16

Exit Ticket

10 circled in drawing; 9, 4, 13; 10, 3, 13; 13

Homework

1. 10 circled in drawing; 4, 13; 3, 13; 13
2. 10 circled in drawing; 5, 14; 4, 14; 14
3. 10 circled in drawing; 6, 15; 5, 15; 15
4. 10 circled in drawing; 7, 16; 6, 16; 16
5. 10 circled in drawing; 8, 17; 7, 17; 17

Lesson 4

Sprint

Side A

- | | | |
|--------|--------|--------|
| 1. 13 | 11. 17 | 21. 13 |
| 2. 15 | 12. 13 | 22. 16 |
| 3. 15 | 13. 16 | 23. 14 |
| 4. 11 | 14. 17 | 24. 4 |
| 5. 14 | 15. 17 | 25. 1 |
| 6. 16 | 16. 15 | 26. 6 |
| 7. 15 | 17. 16 | 27. 8 |
| 8. 11 | 18. 16 | 28. 9 |
| 9. 13 | 19. 15 | 29. 5 |
| 10. 17 | 20. 15 | 30. 10 |

Side B

- | | | |
|--------|--------|--------|
| 1. 14 | 11. 17 | 21. 14 |
| 2. 16 | 12. 17 | 22. 18 |
| 3. 15 | 13. 18 | 23. 17 |
| 4. 11 | 14. 19 | 24. 1 |
| 5. 12 | 15. 19 | 25. 2 |
| 6. 15 | 16. 12 | 26. 7 |
| 7. 15 | 17. 13 | 27. 10 |
| 8. 16 | 18. 13 | 28. 2 |
| 9. 14 | 19. 16 | 29. 7 |
| 10. 17 | 20. 17 | 30. 10 |

Problem Set

1. Partial answer provided; 1, 4, 14; 4, 14
2. 10 circled; 1, 2; 2, 12
3. 10 circled; 3, 1; 3, 13
4. 1, 4; 14; 10, 4, 14; picture drawn
5. 5, 1; 15; 10, 5, 15; picture drawn
6. 7, 1; 17; 10, 7, 17; picture drawn
7. Numbers circled into a number bond; 4, 1; 14
8. Numbers circled into a number bond; 16, 1, 6

Exit Ticket

1. 15; 5, 15; picture drawn
2. 13; 10, 3, 13; picture drawn

Homework

1. 1, 2; 12; 10, 2, 12; picture drawn
2. 1, 5; 15; 10, 5, 15; picture drawn
3. 6, 1; 16; 10, 6, 16; picture drawn
4.
 - a. 17; matched with 1, 7
 - b. 15; matched with 1, 5
 - c. 16; matched with 6, 1
5.
 - a. 1, 1; number sentence circled; picture drawn
 - b. 1, 3; picture drawn
 - c. 5, 1; picture drawn

Lesson 5

Problem Set

- 1, 2; 12; 2, 12; 12
- 1, 3; 13; 3, 13
- 1, 1; 11; 10, 1, 11
- 1, 4; 14; 10, 4, 14
- 1, 3; 13; 10, 3, 13
- 1, 6; 16; 10, 6, 16
- 8, 1, 7; 17; 17
- 11; 10, 1
 - 11; 9, 2
- 18; 10, 8
 - 18; 9, 9
- 17; 10, 7, 17
 - 17; 9, 8, 17
- 15; 15, 10, 5
 - 15; 15, 6, 9
- 16; 10, 6, 16
 - 16; 7, 9, 16

Exit Ticket

- Most efficient solution shown; 11
- Most efficient solution shown; 16
- Most efficient solution shown; 14

Homework

- 15; 5, 15; number bond shows 5, 10, 15
- 17; 10, 7, 17; number bond shows 7, 10, 17
- 14; 10, 4, 14; number bond shows 4, 10, 14
- 16; 10, 6, 16; number bond shows 6, 10, 16
- 14; matched with 10, 4, 14
 - 15; matched with 5, 10, 15
 - 17; matched with 7, 10, 17
- Most efficient strategy shown; 16
- Most efficient strategy shown; 11
- Most efficient strategy shown; 10
- Most efficient strategy shown; 17
- Most efficient strategy shown; 13
- Most efficient strategy shown; 18

Lesson 6

Problem Set

1. Answer provided
2. 1, 5; 15; 5, 1; 15; 10, 5, 15
3. 6, 1; 16; 1, 6; 16; 10, 6, 16
4. 13; 10, 3, 13
5. 12; 10, 2, 12
6. 14; 10, 4, 14
7.
 - a. Answer provided
 - b. $10 + 4$
 - c. $10 + 5$
 - d. $10 + 7$
 - e. $10 + 6$
 - f. $10 + 0$
8.
 - a. 12
 - b. 16
 - c. 4
 - d. 12
 - e. 13
 - f. 5
 - g. 19
 - h. 17
 - i. 10
 - j. 14
 - k. 8
 - l. 8
 - m. 16
 - n. 7

Exit Ticket

1. 1, 4, 14; 14; 4, 14
2.
 - a. $16; 7 + 9 = 16; 10 + 6 = 16$
 - b. $15; 9 + 6 = 15; 10 + 5 = 15$
 - c. $17; 17 = 9 + 8; 10 + 7 = 17$

Homework

1.
 - a. 15; $6 + 9 = 15$; answer provided
 - b. 12; $9 + 3 = 12$; $10 + 2 = 12$
 - c. 14; $5 + 9 = 14$; $10 + 4 = 14$
 - d. 17; $17 = 9 + 8$; $10 + 7 = 17$
 - e. 16; $16 = 7 + 9$; $10 + 7 = 17$
2.
 - a. 13
 - b. 13
 - c. 15
 - d. 15
 - e. 17
 - f. 16
 - g. 8
 - h. 17
 - i. 10
 - j. 14
3.
 - a. 9 + 4 colored; answer provided; $9 + 4$
 - b. 9 + 5 colored; $10 + 6 = 9 + 5$
 - c. 8 + 9 colored; $10 + 7 = 8 + 9$
 - d. 9 + 9 colored; $10 + 8 = 9 + 9$

Lesson 7

Fluency Practice

- | | | |
|------|-------|-------|
| 1. 0 | 9. 2 | 17. 4 |
| 2. 3 | 10. 6 | 18. 5 |
| 3. 2 | 11. 1 | 19. 7 |
| 4. 4 | 12. 3 | 20. 8 |
| 5. 3 | 13. 5 | 21. 4 |
| 6. 1 | 14. 6 | 22. 8 |
| 7. 6 | 15. 8 | 23. 9 |
| 8. 4 | 16. 5 | 24. 7 |

Problem Set

- 10 circled; 5, 13; 3, 13; 13
- Picture drawn showing 8 and 4; 10 circled; 4, 12; 2, 12; 12
- Picture drawn showing 3 and 8; 10 circled; 3, 11; 1, 11; 11
- Picture drawn showing 7 and 8; 10 circled; 7, 15; 5, 15; 15

Exit Ticket

Picture drawn and labeled showing 5 and 8; 10 circled; 5, 13; 3, 13; 13

Homework

- Picture drawn and labeled showing 4 and 8; 10 circled; 12; 2, 12; 12
- Picture drawn and labeled showing 6 and 8; 10 circled; 8, 6, 14; 10, 4, 14; 14
- Picture drawn and labeled showing 7 and 8; 10 circled; 8, 7, 15; 10, 5, 15; 15
- Picture drawn and labeled showing 9 and 8; 10 circled; 9, 8, 17; 10, 7, 17; 17

Lesson 8

Sprint

Side A

- | | | |
|--------|--------|--------|
| 1. 10 | 11. 16 | 21. 17 |
| 2. 11 | 12. 16 | 22. 18 |
| 3. 11 | 13. 10 | 23. 9 |
| 4. 10 | 14. 18 | 24. 9 |
| 5. 12 | 15. 18 | 25. 10 |
| 6. 12 | 16. 14 | 26. 4 |
| 7. 10 | 17. 15 | 27. 9 |
| 8. 14 | 18. 15 | 28. 3 |
| 9. 14 | 19. 13 | 29. 4 |
| 10. 10 | 20. 13 | 30. 10 |

Side B

- | | | |
|--------|--------|--------|
| 1. 10 | 11. 15 | 21. 17 |
| 2. 12 | 12. 15 | 22. 18 |
| 3. 12 | 13. 10 | 23. 8 |
| 4. 10 | 14. 14 | 24. 9 |
| 5. 11 | 15. 14 | 25. 10 |
| 6. 11 | 16. 14 | 26. 6 |
| 7. 10 | 17. 15 | 27. 9 |
| 8. 13 | 18. 15 | 28. 5 |
| 9. 13 | 19. 16 | 29. 5 |
| 10. 10 | 20. 16 | 30. 10 |

Problem Set

1. Partial answer provided; 2, 3; 13; 3, 13
2. 10 circled; 2, 1; 11; 1, 11
3. 10 circled; 2, 2; 12; 2, 12
4. Picture drawn; 2, 2; 12; 10, 2, 12
5. Picture drawn; 4, 2; 14; 10, 4, 14
6. Picture drawn; 2, 3; 13; 10, 3, 13
7. 3, 2; 13
8. 15; 2, 5

Exit Ticket

1. Picture drawn; 14; 4, 14
2. Picture drawn; 12; 10, 2, 12

Homework

1. Picture drawn; 2, 2; 12; 10, 2, 12
2. Picture drawn; 2, 4; 14; 10, 4, 14
3. Picture drawn; 5, 2; 15; 10, 5, 15
4.
 - a. Picture drawn; 2, 2; circled
 - b. Picture drawn; 2, 6; circled
 - c. Picture drawn; 5, 2; crossed out
 - d. Picture drawn; 3, 2; crossed out
 - e. Picture drawn; 2, 1; crossed out
 - f. Picture drawn; 7, 1; circled

Lesson 9

Problem Set

- 2, 1; 11; 1, 11; 11
- 2, 2; 12; 2, 12
- 2, 3; 13; 10, 3, 13
- 2, 5; 15; 10, 5, 15
- 2, 2; 12; 10, 2, 12
- 5, 2; 15; 10, 5, 15
- 7, 1; 9; 10, 7, 17
- 11; 10, 1
 - 11; 8, 3
- 15; 10, 5
 - 15; 8, 7
- 16; 6, 10; 16
 - 16; 8, 8; 16
- 12; 12; 2, 10
 - 12; 12; 4, 8
- 14; 4, 10; 14
 - 14; 6, 8; 14

Exit Ticket

- Picture drawn showing 10; 11; 1, 11
- 14; 14; 6, 8
 - 4; 14; 10, 4

Homework

- 2, 1; 11; 1, 11
- 4, 2; 14; 4, 14
- 2, 6; 16; 16, 6
- 13; 3, 2; 13, 3
- 15; 7, 8
 - 15; 15; 5, 10
- 8; 16; 8, 8
 - 16; 16; 6, 10
- 17; 17; 8, 9
 - 17; 17; 7, 10
- $10 + 1 = 11$
- $13 = 10 + 3$
- $8 + 6 = 14$

Lesson 10

Problem Set

- 13; 3, 13
- 14; 4, 14
- 11; 1, 11
- Answer provided.
 - $10 + 3$
 - $10 + 5$
 - $10 + 7$
 - $10 + 1$
 - $10 + 4$
- 11
 - 12
 - 12
- 14
 - 11
 - 13
- 15
 - 14
 - 11
- 16
 - 13
 - 14
- 8
 - 8
 - 9
- 6
 - 7
 - 10

Exit Ticket

- 14; 4, 14
- 12; 2, 12
- 13; 3, 13

Homework

- 14; matched with 14-10-4 bond; $10 + 4 = 14$
- 12; matched with 12-10-2 bond; $10 + 2 = 12$
- 13; matched with 13-10-3 bond; $10 + 3 = 13$
- 11; matched with 11-10-1 bond; $10 + 1 = 11$
- 15; matched with 15-10-5 bond; $10 + 5 = 15$
- 12; 3; 4; 5
- 4; 5; 6
- 5; 6; 7
- 15; 6; 15, 7; 15, 8
- 7; 16, 8; 9, 16
- 17; 17; 17, 9; 17, 10

Lesson 11

Sprint

Side A

- | | | |
|--------|--------|--------|
| 1. 11 | 11. 14 | 21. 13 |
| 2. 12 | 12. 14 | 22. 18 |
| 3. 14 | 13. 15 | 23. 9 |
| 4. 13 | 14. 15 | 24. 9 |
| 5. 10 | 15. 15 | 25. 8 |
| 6. 11 | 16. 12 | 26. 9 |
| 7. 13 | 17. 12 | 27. 8 |
| 8. 12 | 18. 11 | 28. 5 |
| 9. 13 | 19. 12 | 29. 7 |
| 10. 13 | 20. 13 | 30. 7 |

Side B

- | | | |
|--------|--------|--------|
| 1. 10 | 11. 14 | 21. 12 |
| 2. 11 | 12. 15 | 22. 16 |
| 3. 13 | 13. 16 | 23. 8 |
| 4. 12 | 14. 16 | 24. 9 |
| 5. 10 | 15. 16 | 25. 8 |
| 6. 11 | 16. 11 | 26. 9 |
| 7. 13 | 17. 11 | 27. 7 |
| 8. 12 | 18. 10 | 28. 4 |
| 9. 13 | 19. 11 | 29. 7 |
| 10. 12 | 20. 12 | 30. 6 |

Problem Set

1. Student work (a), (b), (d), (e), (f) circled
2. Answers will vary.
3. Drawings will vary; $4 + 8 = 12$
4. Drawings will vary; $5 + 7 = 12$

Exit Ticket

1. Problem solved and most efficient solution circled; $5 + 8 = 13$

Homework

1. Joe's work corrected to show number bond of 1, 6; $9 + 7 = 16$
2. Lori's work corrected to show number bond of 5, 3; $8 + 5 = 13$
3. Joe's work corrected to show the number sentence to match the drawing; $6 + 7 = 13$
4. Frank's work corrected to show number bond of 1, 7; $9 + 8 = 17$

Lesson 12

Problem Set

- 7
- Groups of 10 and 2 drawn; 9 crossed off; 3
- Groups of 10 and 4 drawn; 9 crossed off; 5
- Number bond shows 15, 10, 5; groups of 10 and 5 drawn; 9 crossed off; 6
- Number bond shows 17, 10, 7; groups of 10 and 7 drawn; 9 crossed off; 8
- Number bond shows 18, 10, 8; groups of 10 and 8 drawn; 9 crossed off; 9

Exit Ticket

Number bond shows 16, 10, 6; groups of 10 and 6 drawn; 9 crossed off from dinosaur books; 7

Homework

- Number bond shows 15, 10, 5; groups of 10 and 5 drawn; 9 crossed off from eating nuts; 6
- Number bond shows 17, 10, 7; groups of 10 and 7 drawn; 9 crossed off from the leaf; 8
- Groups of 10 and 3 drawn; 9 crossed off from the sleeping ants; 13, 3; 4
- Groups of 10 and 4 drawn; answers will vary.

Lesson 13

Problem Set

1. 9 crossed off; 4
2. 5-group rows showing 15; 9 crossed off; number bond shows 10, 5; 6
3. 5-group rows showing 17; 9 crossed off; number bond shows 17, 10, 7; 8
4. 7; number bond showing 16, 10, 6; 5-group rows showing 16; 9 crossed off; $16 - 9 = 7$
5. 3; number bond showing 12, 10, 2; 5-group rows showing 12; 9 crossed off; $12 - 9 = 3$
6. 10; number bond showing 19, 10, 9; 5-group rows showing 19; 9 crossed off; $19 - 9 = 10$

Exit Ticket

Number bond showing 14, 10, 4; 5-group rows showing 14; 9 crossed off; 5

Homework

1. 11; 9 crossed off; $11 - 9 = 2$; 2
2. 5-group rows showing 19; 9 crossed off; number bond showing 19, 10, 9; $19 - 9 = 10$; 10
3. 5-group rows showing 18; 9 crossed off; number bond showing 18, 10, 8; $18 - 9 = 9$; 9
4. 14; 5-group rows showing 14; 9 crossed off; 14, 10; $14 - 10 = 4$; 4

Lesson 14

Sprint

Side A

- | | | |
|-------|-------|--------|
| 1. 1 | 11. 2 | 21. 5 |
| 2. 2 | 12. 8 | 22. 10 |
| 3. 4 | 13. 9 | 23. 9 |
| 4. 3 | 14. 1 | 24. 8 |
| 5. 4 | 15. 0 | 25. 3 |
| 6. 5 | 16. 5 | 26. 4 |
| 7. 4 | 17. 4 | 27. 1 |
| 8. 6 | 18. 3 | 28. 2 |
| 9. 7 | 19. 7 | 29. 3 |
| 10. 3 | 20. 6 | 30. 8 |

Side B

- | | | |
|-------|--------|--------|
| 1. 2 | 11. 4 | 21. 7 |
| 2. 1 | 12. 6 | 22. 10 |
| 3. 2 | 13. 7 | 23. 9 |
| 4. 1 | 14. 3 | 24. 8 |
| 5. 3 | 15. 5 | 25. 7 |
| 6. 1 | 16. 10 | 26. 8 |
| 7. 2 | 17. 9 | 27. 0 |
| 8. 3 | 18. 8 | 28. 1 |
| 9. 7 | 19. 9 | 29. 2 |
| 10. 3 | 20. 8 | 30. 8 |

Problem Set

1. Number sentences on the left appropriately matched with pictures
2. Group of 10 circled; 3
3. Group of 10 circled; 5
4. Group of 10 circled; 6
5. Group of 10 circled; 4
6. Group of 10 circled; 7
7. Group of 10 circled; 8
8. Group of 10 drawn and circled; 3
9. Group of 10 drawn and circled; 4
10. Group of 10 drawn and circled; 5
11. Group of 10 drawn and circled; 6

Exit Ticket

1. Group of 10 drawn and circled; number bond showing 17, 9, 8; 8
2. Group of 10 drawn and circled; number bond showing 14, 9, 5; 5
3. Group of 10 drawn and circled; number bond showing 15, 9, 6; 6
4. Group of 10 drawn and circled; number bond showing 18, 9, 9; 9

Homework

1. Group of 10 circled; number bond showing 15, 9, 6; 6
2. Group of 10 drawn and circled; number bond showing 14, 9, 5; 5
3. Group of 10 drawn and circled; number bond showing 12, 9, 3; 3
4. Group of 10 drawn and circled; number bond showing 13, 9, 4; 4
5. Group of 10 drawn and circled; number bond showing 16, 9, 7; 7
6.
 - a. 4; $1 + 3 = 4$
 - b. 5; $1 + 4 = 5$
 - c. 6; $1 + 5 = 6$
 - d. 7; $1 + 6 = 7$
7. Number bond drawn showing 17, 9, 8; $9 + 8 = 17$

Lesson 15

Problem Set

1. Number sentences appropriately matched to pictures
2. 5-group rows drawn; 9 crossed off; 2
3. 5-group rows drawn; 9 crossed off; 4
4. 5-group rows drawn; 9 crossed off; 7
5. 5-group rows drawn; 9 crossed off; 8
6. 5-group rows drawn; 9 crossed off; 5
7. 5-group rows drawn; 9 crossed off; 4
8. 5-group rows drawn; 9 crossed off; 3
9. 5-group rows drawn; 9 crossed off; 6
10. a. 5-group rows drawn showing 10 and 4; 14
b. 5-group rows drawn; 9 crossed off; 5
11. 14, 9, 5; $9 + 5 = 14$; $14 - 5 = 9$

Exit Ticket

1. 5-group rows drawn; 9 crossed off; 8
2. 5-group rows drawn; 9 crossed off; 10

Homework

1. Answer provided.
 $16 - 9 = 7$
 $19 - 9 = 10$
 $17 - 9 = 8$
 $18 - 9 = 9$
 $14 - 9 = 5$
2. 5-groups drawn; 6; $15 - 9 = 6$
3. 5-groups drawn; 8; $17 - 9 = 8$
4. 5-groups drawn; 7; $16 - 9 = 7$
5. 5-groups drawn; 17; 17, 9, 8; $9 + 8 = 17$; $17 - 9 = 8$
6. 5-groups drawn; 8; 17, 9, 8; $17 - 8 = 9$; $8 + 9 = 17$

Lesson 16

Problem Set

- 3; addition number sentence or drawing
 - Number bond showing 2, 10; 3; 3
- 6; addition number sentence or drawing
 - Number bond showing 5, 10; 6; 6
- 2; addition number sentence or drawing
 - Number bond showing 1, 10; 2
Strategy will vary.
- 9; addition number sentence or drawing
 - Number bond showing 8, 10; 9
Strategy will vary.
- Answers will vary.

Exit Ticket

- 4; addition number sentence or drawing
 - Number bond showing 3, 10; 4
- 8; addition number sentence or drawing
 - Number bond showing 7, 10; 8

Homework

- 8; work based on strategy used to solve
- 3; work based on strategy used to solve
- 7; work based on strategy used to solve
- 2; work based on strategy used to solve
- 5; work will vary.
- 8; work will vary.
- Paul: 3, Lisa: 9; work will vary.
- Answers will vary.

Lesson 17

Sprint

Side A

- | | | |
|-------|-------|--------|
| 1. 1 | 11. 4 | 21. 4 |
| 2. 3 | 12. 4 | 22. 8 |
| 3. 1 | 13. 1 | 23. 9 |
| 4. 4 | 14. 6 | 24. 4 |
| 5. 1 | 15. 6 | 25. 5 |
| 6. 2 | 16. 1 | 26. 7 |
| 7. 1 | 17. 2 | 27. 6 |
| 8. 3 | 18. 3 | 28. 8 |
| 9. 3 | 19. 6 | 29. 9 |
| 10. 1 | 20. 5 | 30. 10 |

Side B

- | | | |
|-------|-------|-------|
| 1. 1 | 11. 4 | 21. 3 |
| 2. 2 | 12. 4 | 22. 6 |
| 3. 1 | 13. 1 | 23. 7 |
| 4. 3 | 14. 3 | 24. 3 |
| 5. 1 | 15. 3 | 25. 4 |
| 6. 4 | 16. 1 | 26. 6 |
| 7. 1 | 17. 2 | 27. 5 |
| 8. 5 | 18. 4 | 28. 6 |
| 9. 5 | 19. 5 | 29. 8 |
| 10. 1 | 20. 4 | 30. 7 |

Problem Set

1. Number sentences appropriately matched to pictures
2. Group of 10 circled; 8 crossed off; 5
3. Group of 10 circled; 8 crossed off; 3
4. Group of 10 is circled; 8 crossed off; 7
5. Group of 10 circled; 8 crossed off; 11
6. Group of 10 circled; 8 crossed off; 8
7. Group of 10 circled; 8 crossed off; 9
8. 10 drawn and circled or number bond drawn; 4
9. 10 drawn and circled or number bond drawn; 5
10. 10 drawn and circled or number bond drawn; 6
11. 10 drawn and circled or number bond drawn; 7

Exit Ticket

1. a. 10 drawn and circled; 8 crossed off; 4
b. 10 drawn and circled; 8 crossed off; 6
2. Number bond shows 5, 10; 7

Homework

1. a. 6; matched to first picture
b. 8; matched to hearts
c. 3; matched to stars
d. 5; matched to third picture
2. Number bond or drawing to match number sentence; 6
3. 10 circled; $17 - 8 = 9$; 9
4. 10 circled; 8 crossed off; $12 - 8 = 4$; 4
5. Number bond or drawing; $15 - 8 = 7$; 7
6. 18, 8; $18 - 8 = 10$; number bond showing 18, 10, 8

Lesson 18

Problem Set

- Matched to third picture
 - Matched to second picture
 - Matched to first picture
 - Matched to fifth picture
 - Matched to fourth picture
- 5-group row and ones drawn; 8 crossed off; 3 ; $2 + 1 = 3$
- 5-group row and ones drawn; 8 crossed off; 4 ; $2 + 2 = 4$
- 5-group row and ones drawn; 8 crossed off; 7 ; $2 + 5 = 7$
- 5-group row and ones drawn; 8 crossed off; 11 ; $2 + 9 = 11$
- 5-group row and ones drawn; 8 crossed off; 8 ; $2 + 6 = 8$
- 5-group row and ones drawn; 9 crossed off; 7 ; $1 + 6 = 7$
- 5-group row and ones drawn; 9 crossed off; 5 ; $1 + 4 = 5$
- 14 ; number bond drawn showing 4, 2
 - 6 ; number bond drawn showing 10, 4

Exit Ticket

- 5-group row and ones drawn; 8 crossed off; 6; 4, 6
- 5-group row and ones drawn; 8 crossed off; 9; 7, 9

Homework

- 5-group row and ones drawn; 8 crossed off; $2 + 3 = 5$; $13 - 8 = 5$; 5
- 5-group row and ones drawn; 8 crossed off; $2 + 5 = 7$; $15 - 8 = 7$; 7
- 5-group row and ones drawn; 8 crossed off; $2 + 9 = 11$; $19 - 8 = 11$; 11
- 15 ; number bond drawn showing 7 or 8
- 7 ; number bond drawn showing 10, 5
- 5-group row and ones drawn; 9 crossed off; 2
- 5-group row and ones drawn; 9 crossed off; 5
- 5-group row and ones drawn; 8 crossed off or number bond drawn; $14 - 8 = 6$; 6

Lesson 19

Problem Set

- 6; number bond provided; 6
- 9; number bond showing 7, 10
- 10; number bond showing 8, 10
- 5
- 7
- 4; number bond showing 2, 10
 - 4; strategy will vary.
- 3; number bond showing 1, 10
 - 3; strategy will vary.
- 8; number bond showing 6, 10
 - 8; strategy will vary.
- 11; number bond showing 9, 10
 - 11; strategy will vary.

Exit Ticket

- Number bond showing 1, 10; 3
 - 3
- Number bond showing 5, 10; 7
 - 7

Homework

- Number bond showing 2, 10; 4
 - 4
- Number bond showing 5, 10; 7
 - 7
- Strategy will vary; 3
- Strategy will vary; 9
- 8; 8
- $13 - 8 = 5$; number bond showing 3, 10; 5
- $4; 8 + \underline{4} = 12$
 - $7; 8 + \underline{7} = 15$
 - $10; 8 + \underline{10} = 18$
 - $3; 8 + \underline{3} = 11$

Lesson 20

Sprint

Side A

- | | | |
|-------|-------|--------|
| 1. 2 | 11. 4 | 21. 5 |
| 2. 4 | 12. 4 | 22. 9 |
| 3. 2 | 13. 2 | 23. 10 |
| 4. 5 | 14. 7 | 24. 3 |
| 5. 2 | 15. 7 | 25. 4 |
| 6. 6 | 16. 2 | 26. 7 |
| 7. 2 | 17. 3 | 27. 6 |
| 8. 3 | 18. 4 | 28. 8 |
| 9. 3 | 19. 7 | 29. 9 |
| 10. 2 | 20. 6 | 30. 10 |

Side B

- | | | |
|-------|-------|-------|
| 1. 2 | 11. 5 | 21. 4 |
| 2. 3 | 12. 5 | 22. 7 |
| 3. 2 | 13. 2 | 23. 8 |
| 4. 4 | 14. 4 | 24. 2 |
| 5. 2 | 15. 4 | 25. 3 |
| 6. 5 | 16. 2 | 26. 5 |
| 7. 2 | 17. 3 | 27. 4 |
| 8. 4 | 18. 5 | 28. 5 |
| 9. 4 | 19. 6 | 29. 7 |
| 10. 2 | 20. 5 | 30. 8 |

Problem Set

1. Drawing or number bond shown; 2
2. Drawing or number bond shown; 3
3. Drawing or number bond shown; 4
4. Drawing or number bond shown; 5
5. Drawing or number bond shown; 6
6. Drawing or number bond shown; 5
7.
 - a. Answer provided.
 - b. $18 - 8$
 - c. $13 - 9$
 - d. $15 - 9$
8.
 - a. 3
 - b. 4
 - c. 5
9.
 - a. 4
 - b. 5
 - c. 6
10.
 - a. 4
 - b. 5
 - c. 6
11.
 - a. 7
 - b. 9
 - c. 8
12.
 - a. 7
 - b. 6
 - c. 8
13.
 - a. 9
 - b. 8
 - c. 9

Exit Ticket

1. Appropriate drawings or number bond included for each
 - a. 5
 - b. 7
 - c. 6
 - d. 9
 - e. 7
 - f. 8

Homework

1. 6
2. 7
3. 8
4. 8
5. 9
6. 10
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. a. $18 - 8$
b. $12 - 7$
14. a. Drawing or number bond drawn showing Elsie is right since both expressions are equal
b. Drawing or number bond drawn showing John is right since both expressions are not equal
c. Drawing or number bond drawn showing Elsie is correct
d. 7; other answers will vary.

Lesson 21

Sprint

Side A

- | | | |
|-------|-------|--------|
| 1. 1 | 11. 4 | 21. 8 |
| 2. 2 | 12. 5 | 22. 10 |
| 3. 4 | 13. 4 | 23. 9 |
| 4. 2 | 14. 5 | 24. 10 |
| 5. 3 | 15. 6 | 25. 7 |
| 6. 5 | 16. 5 | 26. 8 |
| 7. 3 | 17. 6 | 27. 9 |
| 8. 4 | 18. 7 | 28. 8 |
| 9. 6 | 19. 6 | 29. 9 |
| 10. 3 | 20. 7 | 30. 16 |

Side B

- | | | |
|-------|-------|--------|
| 1. 1 | 11. 3 | 21. 8 |
| 2. 2 | 12. 6 | 22. 7 |
| 3. 3 | 13. 3 | 23. 8 |
| 4. 2 | 14. 4 | 24. 9 |
| 5. 3 | 15. 7 | 25. 7 |
| 6. 4 | 16. 4 | 26. 8 |
| 7. 3 | 17. 5 | 27. 9 |
| 8. 4 | 18. 8 | 28. 7 |
| 9. 5 | 19. 6 | 29. 9 |
| 10. 2 | 20. 7 | 30. 16 |

Problem Set

1. Student work (a), (b), (c), (e), (f) circled
2. New drawing shown for (d) starting at 7; $16 - 7 = 9$
3. Work shown; $12 - 5 = 7$; 7
4. Work shown; $17 - 9 = 8$; 8

Exit Ticket

Work shown for each strategy; explanations will vary; $14 - 6 = 9$

Homework

1.
 - a. Take from ten; $13 - 6 = 7$; strategy shown correctly solving problem
 - b. Make ten; different strategy shown correctly solving problem
 - c. Explanations may vary.
2.
 - a. Take from ten; different strategy shown correctly solving problem
 - b. Make ten; $9 + 8 = 17$; strategy shown correctly solving problem
 - c. Explanations may vary.

Lesson 22

Sprint

Side A

- | | | |
|-------|-------|-------|
| 1. 1 | 11. 4 | 21. 7 |
| 2. 2 | 12. 6 | 22. 8 |
| 3. 2 | 13. 6 | 23. 5 |
| 4. 2 | 14. 2 | 24. 5 |
| 5. 1 | 15. 3 | 25. 4 |
| 6. 3 | 16. 6 | 26. 3 |
| 7. 4 | 17. 4 | 27. 4 |
| 8. 1 | 18. 2 | 28. 4 |
| 9. 2 | 19. 5 | 29. 2 |
| 10. 3 | 20. 6 | 30. 5 |

Side B

- | | | |
|-------|-------|-------|
| 1. 2 | 11. 4 | 21. 5 |
| 2. 3 | 12. 3 | 22. 4 |
| 3. 0 | 13. 4 | 23. 3 |
| 4. 2 | 14. 3 | 24. 3 |
| 5. 1 | 15. 2 | 25. 3 |
| 6. 0 | 16. 5 | 26. 1 |
| 7. 1 | 17. 6 | 27. 2 |
| 8. 4 | 18. 7 | 28. 3 |
| 9. 3 | 19. 4 | 29. 5 |
| 10. 2 | 20. 7 | 30. 5 |

Problem Set

1. Labeled drawing; $5 + 6 = 11$ or $11 - 5 = 6$
2. Labeled drawing; $8 + 6 = 14$ or $14 - 8 = 6$
3. Labeled drawing; $8 + 7 = 15$ or $15 - 8 = 7$
4. Labeled drawing; $7 + 9 = 16$ or $16 - 7 = 9$

Exit Ticket

1. Labeled drawing; $8 + 9 = 17$ or $17 - 8 = 9$
2. Labeled drawing; $8 + 5 = 13$ or $13 - 8 = 5$

Homework

1. Labeled drawing and statement; $6 + 8 = 14$ or $14 - 6 = 8$
2. Labeled drawing and statement; $6 + 9 = 15$ or $15 - 6 = 9$.
3. Labeled drawing and statement; $9 + 9 = 18$ or $18 - 9 = 9$
4. Labeled drawing and statement; $8 + 9 = 17$ or $17 - 8 = 9$
5. Labeled drawing and statement; $9 + 8 = 17$ or $17 - 9 = 8$.
6. Labeled drawing and statement; $9 + 7 = 16$ or $16 - 9 = 7$

Lesson 23

Sprint

Side A

- | | | |
|-------|-------|-------|
| 1. 1 | 11. 4 | 21. 7 |
| 2. 2 | 12. 6 | 22. 8 |
| 3. 2 | 13. 6 | 23. 5 |
| 4. 2 | 14. 2 | 24. 5 |
| 5. 1 | 15. 3 | 25. 4 |
| 6. 3 | 16. 6 | 26. 3 |
| 7. 4 | 17. 4 | 27. 4 |
| 8. 1 | 18. 2 | 28. 4 |
| 9. 2 | 19. 5 | 29. 2 |
| 10. 3 | 20. 6 | 30. 5 |

Side B

- | | | |
|-------|-------|-------|
| 1. 2 | 11. 4 | 21. 5 |
| 2. 3 | 12. 3 | 22. 4 |
| 3. 0 | 13. 4 | 23. 3 |
| 4. 2 | 14. 3 | 24. 3 |
| 5. 1 | 15. 2 | 25. 3 |
| 6. 0 | 16. 5 | 26. 1 |
| 7. 1 | 17. 6 | 27. 2 |
| 8. 4 | 18. 7 | 28. 3 |
| 9. 3 | 19. 4 | 29. 5 |
| 10. 2 | 20. 7 | 30. 5 |

Problem Set

1. Labeled drawing; $8 + 4 = 12$ or $12 - 8 = 4$; 4
2. Labeled drawing; $5 + 8 = 13$ or $13 - 5 = 8$; 8
3. Labeled drawing; $8 + 7 = 15$ or $15 - 8 = 7$; 7
4. Labeled drawing; $9 + 10 = 19$ or $19 - 9 = 10$; 10

Exit Ticket

Labeled drawing; $7 + 6 = 13$ or $13 - 7 = 6$; 7

Homework

1. Labeled drawing; $9 + 5 = 14$ or $14 - 9 = 5$; 5
2. Labeled drawing; $8 + 9 = 17$ or $17 - 8 = 9$; 9
3. Labeled drawing; $5 + 8 = 13$ or $13 - 5 = 8$; 8
4. Labeled drawing; $12 + 6 = 18$ or $18 - 12 = 6$; 6

Lesson 24

Sprint

Side A

- | | | |
|-------|-------|-------|
| 1. 1 | 11. 3 | 21. 6 |
| 2. 0 | 12. 5 | 22. 6 |
| 3. 2 | 13. 4 | 23. 5 |
| 4. 1 | 14. 3 | 24. 4 |
| 5. 2 | 15. 2 | 25. 7 |
| 6. 3 | 16. 4 | 26. 6 |
| 7. 0 | 17. 3 | 27. 5 |
| 8. 0 | 18. 2 | 28. 2 |
| 9. 1 | 19. 4 | 29. 4 |
| 10. 2 | 20. 5 | 30. 5 |

Side B

- | | | |
|-------|-------|-------|
| 1. 0 | 11. 3 | 21. 5 |
| 2. 1 | 12. 0 | 22. 5 |
| 3. 2 | 13. 1 | 23. 4 |
| 4. 0 | 14. 2 | 24. 3 |
| 5. 1 | 15. 3 | 25. 6 |
| 6. 2 | 16. 3 | 26. 5 |
| 7. 3 | 17. 2 | 27. 4 |
| 8. 0 | 18. 1 | 28. 3 |
| 9. 1 | 19. 3 | 29. 5 |
| 10. 2 | 20. 4 | 30. 4 |

Problem Set

1. Labeled drawing and statement; $11 - 3 = 8$ or $8 + 3 = 11$
2. Labeled drawing and statement; $15 - 9 = 6$ or $9 + 6 = 15$
3. Labeled drawing and statement; $16 - 8 = 8$ or $8 + 8 = 16$
4. Labeled drawing and statement; $18 - 9 = 9$ or $9 + 9 = 18$

Exit Ticket

Labeled drawing and statement; $18 - 9 = 9$ or $9 + 9 = 18$

Homework

1. Labeled drawing and statement; $12 - 9 = 3$ or $9 + 3 = 12$
2. Labeled drawing and statement; $11 - 7 = 4$ or $7 + 4 = 11$
3. Labeled drawing and statement; $17 - 8 = 9$ or $8 + 9 = 17$
4. Labeled drawing and statement; $12 - 9 = 3$ or $9 + 3 = 12$

Lesson 25

Sprint

Side A

- | | | |
|-------|-------|-------|
| 1. 5 | 11. 0 | 21. 4 |
| 2. 6 | 12. 7 | 22. 6 |
| 3. 7 | 13. 8 | 23. 4 |
| 4. 6 | 14. 2 | 24. 3 |
| 5. 7 | 15. 2 | 25. 1 |
| 6. 8 | 16. 6 | 26. 5 |
| 7. 7 | 17. 5 | 27. 5 |
| 8. 1 | 18. 4 | 28. 6 |
| 9. 1 | 19. 7 | 29. 6 |
| 10. 8 | 20. 4 | 30. 6 |

Side B

- | | | |
|-------|-------|-------|
| 1. 4 | 11. 0 | 21. 4 |
| 2. 5 | 12. 6 | 22. 6 |
| 3. 6 | 13. 7 | 23. 5 |
| 4. 5 | 14. 1 | 24. 3 |
| 5. 6 | 15. 1 | 25. 1 |
| 6. 7 | 16. 6 | 26. 6 |
| 7. 6 | 17. 3 | 27. 6 |
| 8. 7 | 18. 2 | 28. 7 |
| 9. 8 | 19. 6 | 29. 5 |
| 10. 1 | 20. 3 | 30. 7 |

Problem Set

Answers will vary.

Exit Ticket

Answers will vary

Homework

1.
 - a. False
 - b. True
 - c. True
 - d. False
 - e. True
 - f. True
2.
 - a. Lola; pictures drawn to explain thinking
 - b. Lola; pictures drawn to explain thinking
 - c. Charlie; pictures drawn to explain thinking
3.
 - a. Answers will vary.
 - b. Answers will vary.
 - c. Answers will vary.

Lesson 26

Problem Set

- 10 circled; 15, 1, 5
- 10 circled; 12, 1, 2
- 10 circled; 17, 7, 1
- 10 circled; 13, 1, 3
- 10 circled; 17, 1, 7
- 1, 2, 10, 2 shown on cards; 1, 2
- 1, 4, 10, 4 shown on cards; 1, 4
- 1, 9, 10, 9 shown on cards; 9, 1
- Circles drawn to show 16; 10, 6; 1, 6
- Circles drawn to show 12; 1, 2
Circles drawn to show 15; 1, 5

Exit Ticket

Matched to cards that read 12, 10, 2; 1, 2

Matched to cards that read 14, 10, 4; 1, 4

Matched to cards that read 17, 10, 7; 1, 7

Homework

- Pile of 10 coins circled; 18; 1, 8
- Purse of coins circled; 17; 1, 7
- Circles drawn to show 18; 10, 8; 1, 8
- Circles drawn to show 13; 13; 1, 3
- Circles drawn to show 12; 1, 2
- Circles drawn to show 13; 1, 3
- 5-group column, circles drawn to show 16; 6, 1
- 5-group column, circles drawn to show 19; 1, 9

Lesson 27

Sprint

Side A

- | | | |
|-------|--------|--------|
| 1. 13 | 11. 0 | 21. 10 |
| 2. 12 | 12. 3 | 22. 10 |
| 3. 11 | 13. 4 | 23. 10 |
| 4. 11 | 14. 5 | 24. 18 |
| 5. 14 | 15. 8 | 25. 19 |
| 6. 16 | 16. 1 | 26. 12 |
| 7. 17 | 17. 2 | 27. 14 |
| 8. 18 | 18. 10 | 28. 15 |
| 9. 2 | 19. 10 | 29. 10 |
| 10. 1 | 20. 7 | 30. 3 |

Side B

- | | | |
|-------|--------|--------|
| 1. 11 | 11. 2 | 21. 10 |
| 2. 12 | 12. 3 | 22. 10 |
| 3. 13 | 13. 5 | 23. 10 |
| 4. 14 | 14. 7 | 24. 16 |
| 5. 15 | 15. 9 | 25. 18 |
| 6. 16 | 16. 0 | 26. 13 |
| 7. 18 | 17. 1 | 27. 15 |
| 8. 18 | 18. 10 | 28. 15 |
| 9. 0 | 19. 10 | 29. 10 |
| 10. 1 | 20. 3 | 30. 3 |

Problem Set

- 1, 8; 1, 8; s crossed off
- 1, 8; 1, 8; s crossed off
- 1, 5; 1, 5; s crossed off
- 2, 0; 2, 0
- 1, 3; 1, 3; s crossed off
- 1, 2; 1, 2; s crossed off
- 8; 0, 8
- 9; 0, 9
- Labeled drawing; $4 + 10 = 14$; 1, 4
- Labeled drawing; $8 + 7 = 15$; 1, 5
- Labeled drawing; $14 - 3 = 11$; 1, 1
- Labeled drawing; $16 - 5 = 11$; 1, 1

Exit Ticket

- 1, 9; 1, 9; s crossed off
- 1, 3; 1, 3; s crossed off
- Labeled drawing; $16 - 9 = 7$; 7; 0, 7

Homework

- 1, 3; 1, 3; s crossed off
- 0, 8; 0, 8
- 0, 9; 0, 9
- 1, 9; 1, 9; s crossed off
- 1, 8; 1, 8; s crossed off
- 0, 9; 0, 9
- Labeled drawing; $8 + 9 = 17$; 1, 7
- Labeled drawing; $14 - 8 = 6$; 0, 6
- Labeled drawing; $6 + 14 = 20$; 2; 0

Lesson 28

Sprint

Side A

- | | | |
|-------|--------|--------|
| 1. 12 | 11. 13 | 21. 20 |
| 2. 3 | 12. 4 | 22. 18 |
| 3. 13 | 13. 14 | 23. 19 |
| 4. 14 | 14. 6 | 24. 2 |
| 5. 6 | 15. 16 | 25. 3 |
| 6. 16 | 16. 15 | 26. 4 |
| 7. 13 | 17. 16 | 27. 12 |
| 8. 6 | 18. 17 | 28. 11 |
| 9. 16 | 19. 18 | 29. 21 |
| 10. 3 | 20. 19 | 30. 32 |

Side B

- | | | |
|-------|--------|--------|
| 1. 11 | 11. 13 | 21. 19 |
| 2. 2 | 12. 2 | 22. 19 |
| 3. 12 | 13. 12 | 23. 20 |
| 4. 13 | 14. 5 | 24. 1 |
| 5. 5 | 15. 15 | 25. 2 |
| 6. 15 | 16. 14 | 26. 3 |
| 7. 12 | 17. 15 | 27. 11 |
| 8. 4 | 18. 16 | 28. 13 |
| 9. 14 | 19. 17 | 29. 23 |
| 10. 3 | 20. 18 | 30. 34 |

Problem Set

1. $1, 4; 9 + 1 = 10; 10 + 4 = 14$
2. $1, 4; 8 + 2 = 10; 10 + 4 = 14$
3. $15; 9 + 1 = 10; 10 + 5 = 15$
4. $8 + 7 = 15; 8 + 2 = 10; 10 + 5 = 15$
5. $4 + 9 = 13; 9 + 1 = 10; 10 + 3 = 13$
6. $7 + 8 = 15; 8 + 2 = 10; 10 + 5 = 15$
7. $8 + 9 = 17; 9 + 1 = 10; 10 + 7 = 17$

Exit Ticket

1. $1, 5; 8 + 2 = 10; 10 + 5 = 15$
2. $1, 3; 9 + 1 = 10; 10 + 3 = 13$

Homework

1. $1, 6; 9 + 1 = 10; 10 + 6 = 16$
2. $1, 3; 8 + 2 = 10; 10 + 3 = 13$
3. $17; 9 + 1 = 10; 10 + 7 = 17$
4. $8 + 7 = 15; 8 + 2 = 10; 10 + 5 = 15$
5. $6 + 9 = 15; 9 + 1 = 10; 10 + 5 = 15$
6. $4 + 8 = 12; 8 + 2 = 10; 10 + 2 = 12$
7. $5 + 7 = 12; 7 + 3 = 10; 10 + 2 = 12$

Lesson 29

Problem Set

- 9; 10, 5, 5; 5, 4, 9
- 5; 10, 8, 2; 2, 3, 5
- 6; 10, 8, 2; 2, 4, 6
- $11 - 5 = 6$; 10, 5, 5; 5, 1, 6
- $16 - 8 = 8$; 10, 8, 2; 2, 6, 8
- $18 - 6 = 12$; $10 - 6 = 4$ and $4 + 8 = 12$ or
 $8 - 6 = 2$ and $2 + 10 = 12$
- $17 - 9 = 8$; $10 - 9 = 1$; $1 + 7 = 8$

Exit Ticket

- 9; 10, 6, 4; 4, 5, 9
- 6; 10, 8, 2; 2, 4, 6

Homework

- 9; 10, 8, 2; 2, 7, 9
- 9; 10, 7, 3; 3, 6, 9
- 9; 10, 3, 7; 7, 2, 9; 9
- $18 - 9 = 9$; $10 - 9 = 1$; $1 + 8 = 9$; 9
- $13 - 6 = 7$; $10 - 6 = 4$; $4 + 3 = 7$; 7
- $14 - 7 = 7$; $10 - 7 = 3$; $3 + 4 = 7$; 7
- $15 - 9 = 6$; $10 - 9 = 1$; $1 + 5 = 6$; 6