California Mathematics

Reteach and Skills Practice Workbook

Contents Include:
- 120 reteach worksheets—one for each lesson
- 120 skills practice worksheets—one for each lesson to reinforce each reteach concept
Reteach and Skills Practice Workbook
TO THE TEACHER  These worksheets are the same ones found in the Chapter Resource Masters for *California Mathematics, Grade 2*. The answers to these worksheets are available at the end of each Chapter Resource Masters booklet.
# CONTENTS

## Chapter 1 Number Sense and Patterns
- 1-1 Tens and Ones ............................................. 1
- 1-2 Place Value to 100 ........................................ 3
- 1-3 Problem-Solving Strategy:
  Use Logical Reasoning ..................................... 5
- 1-4 Read and Write Numbers ............................... 9
- 1-5 Estimate Numbers ...................................... 11
- 1-6 Order Numbers ......................................... 13
- 1-7 Compare Numbers ...................................... 15
- 1-8 Patterns .................................................. 17
- 1-9 Problem-Solving Investigation:
  Choose a Strategy .......................................... 19
- 1-10 Patterns on a Hundred Chart ......................... 23

## Chapter 2 Addition Strategies
- 2-1 Addition Properties ..................................... 25
- 2-2 Count On to Add ....................................... 27
- 2-3 Problem-Solving Strategy: Act it out ............. 29
- 2-4 Doubles .................................................... 33
- 2-5 Near Doubles .......................................... 35
- 2-6 Make 10 ................................................... 37
- 2-7 Add Three Numbers ................................... 39
- 2-8 Problem-Solving Investigation:
  Choose a Strategy .......................................... 41

## Chapter 3 Subtraction Strategies
- 3-1 Count Back to Subtract ................................ 45
- 3-2 Subtract All and Subtract Zero ..................... 47
- 3-3 Use Doubles to Subtract ............................. 49
- 3-4 Problem-Solving Strategy:
  Find a Pattern ............................................ 51
- 3-5 Relate Addition to Subtraction ..................... 55
- 3-6 Missing Addends ....................................... 57
- 3-7 Fact Families .......................................... 59
- 3-8 Problem-Solving Investigation:
  Choose a Strategy .......................................... 61

## Chapter 4 Data and Graphs
- 4-1 Take a Survey .......................................... 65
- 4-2 Picture Graphs ......................................... 67
- 4-3 Problem-Solving Strategy: Write
  a Number Sentence ...................................... 69
- 4-4 Bar Graphs .............................................. 73
- 4-5 Different Ways to Show Data ....................... 75
- 4-6 Range and Mode ....................................... 77
- 4-7 Problem-Solving Investigation:
  Choose a Strategy .......................................... 79

## Chapter 5 Two-Digit Addition
- 5-1 Add Tens ............................................... 83
- 5-2 Count On Tens and Ones ........................... 85
- 5-3 Problem-Solving Strategy:
  Work Backward .......................................... 87
- 5-4 Regroup Ones as Tens ............................... 91
- 5-5 Add One-Digit Numbers and
  Two-Digit Numbers ..................................... 93
- 5-6 Add Two-Digit Numbers ............................ 95
- 5-7 Estimate Sums ........................................ 97
- 5-8 Add Three Two-Digit Numbers .................. 99
- 5-9 Problem-Solving Investigation:
  Choose a Strategy ........................................ 101

## Chapter 6 Two-Digit Subtraction
- 6-1 Subtract Tens ......................................... 105
- 6-2 Count Back Tens and Ones ....................... 107
- 6-3 Regroup Tens as Ones ............................. 109
- 6-4 Problem-Solving Strategy:
  Write a Number Sentence ................................ 111
- 6-5 Subtract One-Digit Numbers
  from Two-Digit Numbers ................................ 115
- 6-6 Subtract Two-Digit Numbers .................... 117
- 6-7 Check Subtraction .................................... 119
- 6-8 Problem-Solving Investigation:
  Choose a Strategy ........................................ 121
- 6-9 Estimate Differences ............................... 125

## Chapter 7 Money
- 7-1 Pennies, Nickels, and Dimes ..................... 127
- 7-2 Quarters and Half Dollars ......................... 129
- 7-3 Count Coins ........................................... 131
- 7-4 Problem-Solving Strategy:
  Act It Out ............................................. 133
- 7-5 Dollar .................................................. 137
- 7-6 Dollars and Cents ................................... 139
- 7-7 Compare Money Amounts ......................... 141
- 7-8 Add Money ............................................. 143
- 7-9 Subtract Money ....................................... 145
- 7-10 Problem-Solving Investigation:
  Choose a Strategy ....................................... 147
Chapter 8 Multiplication and Division Concepts
8-1 Equal Groups ............................... 151
8-2 Repeated Addition ......................... 153
8-3 Arrays........................................ 155
8-4 Multiply 2s and 5s ......................... 157
8-5 Problem-Solving Strategy:
   Draw a Picture.................................. 159
8-6 Multiply 10s .................................. 163
8-7 Repeated Subtraction and
   Division ........................................... 165
8-8 Find Equal Shares ......................... 167
8-9 Problem-Solving Investigation:
   Choose a Strategy ............................. 169
8-10 Equal Groups with Remainders ....... 173

Chapter 9 Fractions
9-1 Unit Fractions ............................... 175
9-2 Other Fractions ............................. 177
9-3 Problem-Solving Strategy:
   Draw a Picture .................................. 179
9-4 Fractions Equal to 1 ....................... 183
9-5 Compare Fractions ......................... 185
9-6 Fractions of a Group ...................... 187
9-7 Other Fractions of a Group ............. 189
9-8 Problem-Solving Investigation:
   Choose a Strategy ............................. 191

Chapter 10 Numbers to 1,000
10-1 Hundreds ................................. 195
10-2 Hundreds, Tens, and Ones .......... 197
10-3 Problem-Solving Strategy:
   Make a List ..................................... 199
10-4 Place Value to 1,000 .................... 203
10-5 Read and Write Numbers to 1,000 .. 205
10-6 Problem-Solving Investigation:
   Choose a Strategy ............................. 207
10-7 Compare Numbers ....................... 211
10-8 Order Numbers ........................... 213
10-9 Number Patterns ....................... 215

Chapter 11 Geometry
11-1 Solid Shapes ................................ 217
11-2 Faces, Edges, and Vertices .......... 219
11-3 Plane Shapes .............................. 221
11-4 Problem-Solving Strategy:
   Find a Pattern .................................. 223
11-5 Sides and Vertices ...................... 227
11-6 Related Plane Shapes to
   Solid Shapes ..................................... 229
11-7 Make New Shapes ....................... 231
11-8 Problem-Solving Investigation:
   Choose a Strategy ............................. 233

Chapter 12 Measurement and Time
12-1 Nonstandard Units ....................... 237
12-2 Measure to the Nearest Inch ......... 239
12-3 Inch, Foot, and Yard .................... 241
12-4 Problem-Solving Strategy:
   Use Logical Reasoning ..................... 243
12-5 Measure to the Nearest Centimeter .. 247
12-6 Centimeter and Meter ................. 249
12-7 Time to the Quarter Hour ............. 251
12-8 Problem-Solving Investigation:
   Choose a Strategy ............................. 253
12-9 Elapsed Time .............................. 257
12-10 Time Relationships .................... 259

Chapter 13 Three-Digit Addition
13-1 Add Hundreds ............................ 261
13-2 Regroup Ones ............................. 263
13-3 Regroup Tens ............................. 265
13-4 Problem-Solving Strategy:
   Make a Table ................................... 267
13-5 Estimate Sums ............................. 271
13-6 Add Money ................................. 273
13-7 Problem-Solving Investigation:
   Choose a Strategy ............................. 275

Chapter 14 Three-Digit Subtraction
14-1 Subtract Hundreds ...................... 279
14-2 Regroup Tens ............................. 281
14-3 Regroup Hundreds ...................... 283
14-4 Problem-Solving Strategy:
   Guess and Check .............................. 285
14-5 Estimate Differences .................... 289
14-6 Subtract Money ......................... 291
14-7 Problem-Solving Investigation:
   Choose a Strategy ............................. 293
Another name for ten ones is one ten.

\[ \begin{array}{c}
\text{tens} \\
\text{ones}
\end{array} \]

\[ \begin{array}{c}
3 \\
4
\end{array} \]

\[ 3 \text{ tens } 4 \text{ ones} = 34 \text{ in all} \]

Count how many tens and ones. Write the number.

1. \[ \begin{array}{c}
\text{tens} \\
\text{ones}
\end{array} \]

\[ \begin{array}{c}
5 \\
2
\end{array} \]

\[ 5 \text{ tens } 2 \text{ ones} = 52 \text{ in all} \]

2. \[ \begin{array}{c}
\text{tens} \\
\text{ones}
\end{array} \]

\[ \begin{array}{c}
\hfill \\
\hfill
\end{array} \]

\[ \hfill \text{tens} \hfill \text{ ones} = \hfill \text{ in all} \]

3. \[ \begin{array}{c}
\text{tens} \\
\text{ones}
\end{array} \]

\[ \begin{array}{c}
\hfill \\
\hfill
\end{array} \]

\[ \hfill \text{tens} \hfill \text{ ones} = \hfill \text{ in all} \]
Write how many tens and ones.

1. \(15 = \underline{1} \text{ ten } \underline{5} \text{ ones}\)
   \[\underline{10} + \underline{5} = \underline{15}\]

2. \(43 = \underline{?} \text{ tens } \underline{?} \text{ ones}\)
   \[\underline{?} + \underline{?} = \underline{?}\]

3. \(66 = \underline{?} \text{ tens } \underline{?} \text{ ones}\)
   \[\underline{?} + \underline{?} = \underline{?}\]

Draw a picture to solve.

4. There are 10 pencils in a box.
   Deb buys 3 boxes.
   How many pencils will she have?
   \[\underline{?} \text{ pencils}\]

5. Juan buys 2 boxes of erasers.
   Each box has 10 erasers.
   Juan buys 4 more erasers.
   How many erasers will Juan have in all?
   \[\underline{?} \text{ erasers}\]
Reteach

Place Value to 100

Each digit in a number has a value.

27 = 2 tens + 7 ones
   = 20 + 7

Circle the value of the underlined digit.

1. 32
   3 or 30

2. 45
   4 or 40

3. 63
   3 or 30

4. 51
   5 or 50

5. 49
   9 or 90

6. 18
   1 or 10
Circle the value of the underlined digit.

1. 63  6 or 60
2. 48  8 or 80
3. 19  1 or 10
4. 86  8 or 80
5. 27  7 or 70
6. 71  7 or 70
7. 59  9 or 90
8. 15  5 or 50
9. 93  9 or 90
10. 41  1 or 10
11. 52  5 or 50
12. 76  6 or 60
13. 31  3 or 30
14. 29  2 or 20
15. 65  5 or 50

Use place value to solve.

16. Kai has 59 pennies. A drink costs 69 pennies. Does he have enough to buy the water? How do you know?
Reteach (1)  
Problem-Solving Strategy: Logical Reasoning

Three boys ride bicycles.
Pat rides behind Bill.
Bill rides behind Rob.
Who rides in front?

<table>
<thead>
<tr>
<th>Step 1</th>
<th>What do I know?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand</td>
<td>Pat rides behind Bill.</td>
</tr>
<tr>
<td></td>
<td>Bill rides behind Rob.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>How will I find the answer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>I can use logical reasoning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Use logical reasoning.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solve</td>
<td>The first clue: Pat is behind Bill.</td>
</tr>
<tr>
<td></td>
<td>Write the order. __________, __________</td>
</tr>
<tr>
<td></td>
<td>The second clue: Bill is behind Rob.</td>
</tr>
<tr>
<td></td>
<td>Write the order. __________, __________</td>
</tr>
<tr>
<td></td>
<td>Who rides in front? __________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Does my answer make sense?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Problem-Solving Strategy: Logical Reasoning

Use logical reasoning to solve.

1. Kris, Nick, and Lara share a bus seat. Kris sits by the window. Lara is not sitting next to Kris. Who sits in the middle?

2. Tim, Emma, Ling, and Cory run a race. Emma is first. Ling is after Tim. Tim is not second. Who is second?

3. Pete, Ed, and Jane buy ice cream. Their cones have 1, 2, and 3 scoops. Pete has 2 scoops. Ed has more scoops than Pete. How many scoops does Jane have?

   _____ scoop(s)

4. Juan, Mia, and Wes pick 3 cards. Their numbers are 8, 5, and 1. Juan picks number 5. Wes does not pick number 8. Who picks number 8?

Show your work here.
Skills Practice

Problem-Solving Strategy: Logical Reasoning

Use logical reasoning to solve.

1. Zach, Alex, and Jen are on stage. Zach is on the left. Jen is not next to Zach. Who is in the middle?

2. Lori, Sara, Jill, and Ann are in line. Lori is first. Sara is after Lori. Ann is before Jill. Who is fourth?

3. Muhammed, Maria, and Chan have tickets. They are numbered 1, 2, and 3. Maria has number 2. Chan does not have number 3. Who has number 3?

4. Faye, Dan, and Trey are wearing soccer shirts. The shirts are numbered 2, 6, and 7. Dan has number 6. Trey’s number is greater than Dan’s. Who has number 2?
Reteach

Read and Write Numbers

You can write word names for numbers.

<table>
<thead>
<tr>
<th></th>
<th>One</th>
<th>11 eleven</th>
<th>30 thirty</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>two</td>
<td>12 twelve</td>
<td>40 forty</td>
</tr>
<tr>
<td>3</td>
<td>three</td>
<td>13 thirteen</td>
<td>50 fifty</td>
</tr>
<tr>
<td>4</td>
<td>four</td>
<td>14 fourteen</td>
<td>60 sixty</td>
</tr>
<tr>
<td>5</td>
<td>five</td>
<td>15 fifteen</td>
<td>70 seventy</td>
</tr>
<tr>
<td>6</td>
<td>six</td>
<td>16 sixteen</td>
<td>80 eighty</td>
</tr>
<tr>
<td>7</td>
<td>seven</td>
<td>17 seventeen</td>
<td>90 ninety</td>
</tr>
<tr>
<td>8</td>
<td>eight</td>
<td>18 eighteen</td>
<td>100 one hundred</td>
</tr>
<tr>
<td>9</td>
<td>nine</td>
<td>19 nineteen</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>ten</td>
<td>20 twenty</td>
<td></td>
</tr>
</tbody>
</table>

Write the number and number words.

1. 

17, seventeen

2. 

3. 

4. 

Write the number or the number words.

1. seventy  70  
2. sixteen  

3. thirty-seven  
4. twenty-five  

5. eighty-nine  
6. twelve  

7. forty-eight  
8. ninety-two  

9. fifty-one  
10. sixty-three  

11. 23  
12. 45  

13. 78  
14. 53  

15. 13  
16. 90  

Solve.

17. Jamal needs to find four numbers using the digits 3 and 4. He named 3 and 34. Name the other two numbers.

18. Which number word do you think is the hardest to spell? Why do you think so?

______________________________

______________________________
Reteach

Estimate Numbers

Count to get an exact number.

_____ grapes  _____ grapes  _____ grapes

Make your estimate. Use the jars to help.
Circle your answer.

1. about 10  about 20

2. about 10  about 50

3. about 20  about 50

4. about 10  about 20

5. about 10  about 50

6. about 20  about 50
Estimate. Circle your answer.

1. ![Drum Image]  about 20  about 50
   ![Guitar Image]  about 10  about 60

2. ![Piano Image]  about 30  about 80
   ![French Horn Image]  about 10  about 50

Estimate to solve.

5. Mr. Green orders 48 horns for the band. The band has five different sections. Two sections have 10 children. Three sections have more than 10 children. Is there a horn for every child in the band? How do you know?
Reteach

Order Numbers

The hundred chart gives the numbers 1 to 100 in order.

<p>| | | | | | | | | | | |</p>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

22 comes just before 23
25 comes between 24 and 26
29 comes just after 28

Use the chart to help you answer.

Write the number that comes:

<table>
<thead>
<tr>
<th>just before</th>
<th>just after</th>
<th>between</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. __42___43</td>
<td>49, __<strong>50</strong></td>
<td>43, __44__45</td>
</tr>
<tr>
<td>2. _____45</td>
<td>51, ____</td>
<td>47, ____49</td>
</tr>
<tr>
<td>3. _____71</td>
<td>72, ____</td>
<td>74, ____76</td>
</tr>
<tr>
<td>4. _____77</td>
<td>88, ____</td>
<td>90, ____92</td>
</tr>
</tbody>
</table>

Circle the correct words.

5. 26 comes ______27
   just before
   just after
   between

6. 28 comes ______27
   just before
   just after
   between
Skills Practice

Order Numbers

Use the number line to fill in the blanks.

1. 33, 34, 35 | 43, ____, 45 | 34, 35, __

2. ___, 39, 40 | 45, 46, ____ | 37, ____ , 39

3. 39, ____ , 41 | 47, 48, ____ | ____ , 46, 47

4. 48, 49, ____ | 29, ____ , 31 | ____ , 38, 39

5. ____ , 38, 39, ____ | ____ , 31, 32, ____

6. ____ , 44, ____, 46 | 40, ____ , ____ , 43

7. 37, 38, ____ , ____ | ____ , 39, ____ , 41

8. 46, ____ , ____ , 49 | 34, 35, ____ , ____

Use number order to solve.

9. Cindy drops her notebook.
   She picked up pages 28, 29, 32, 33, 34, and 35.
   Which pages are missing?
   _____________
Reteach

Compare Numbers

You can use models to help you compare numbers. First compare tens. If they are equal, compare ones.

12 is less than 22 because 1 is less than 2.

22 is greater than 12 because 2 is greater than 1.

12 is equal to 12 because 1 is the same as 1 and 2 is the same as 2.

12 < 22  22 > 12  12 = 12

Compare. Write >, <, or =.

1.

24 < 33  43 = 43  20 > 13

2. 21 < 35  18 = 18  66 > 6

3. 25 < 45  66 = 6  72 = 72

4. 52 > 47  88 > 81  31 < 39
Skills Practice

Compare Numbers

Compare. Write >, <, or =.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>47</td>
<td>38</td>
</tr>
<tr>
<td>2.</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>3.</td>
<td>95</td>
<td>59</td>
</tr>
<tr>
<td>4.</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>5.</td>
<td>27</td>
<td>47</td>
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<tr>
<td>6.</td>
<td>83</td>
<td>43</td>
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<tr>
<td>7.</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>8.</td>
<td>80</td>
<td>59</td>
</tr>
</tbody>
</table>

Compare numbers to solve.

9. Ken has more fruit bars than his sister Keesha. Ken has 7 fruit bars. Write how many fruit bars Keesha may have.

________________________ fruit bars
You can use patterns to solve problems. Some patterns are *repeating patterns*.

Draw a picture to continue each pattern.

1. ![Pattern](image1)
   - A A A B A A A B A A A B

2. ![Pattern](image2)
   - A B B A B B A B B

3. ![Pattern](image3)
   - 2 4 6

Some patterns are *growing patterns*.
Skills Practice

Patterns

Draw a picture to continue the pattern.

1. □ □ □
   1 2 3

2. ○ ○ ○ ○
   8 6 4

3. × × ×
   4 3 2

4. □ □ □ □
   3 6 9

Solve.

5. Owen walks 3 miles each day. How many miles will he walk in 5 days.
   _____ miles

6. Kat is building this block pattern: 2 blocks, 4 blocks, 6 blocks. How many blocks should Kat build next?
   _____ blocks
Problem-Solving Investigation: Choose a Strategy

There are 20 children on the playground.
Eleven children play kickball.
Five children play hopscotch.
The rest play soccer.

How many children play soccer?

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Read</th>
<th>What do I know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>There are 20 children on the playground.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 play kickball.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 play hopscotch.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Plan</th>
<th>How will I find how many?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I can act it out.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Solve</th>
<th>I can use counters to act it out.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>![Counter Illustration]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Check</th>
<th>Did I act it out? _____</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Does my answer make sense? _____</td>
</tr>
</tbody>
</table>
Reteach (2)  
2MR1.1, 2NS2.2

Problem-Solving Investigation: Choose a Strategy

<table>
<thead>
<tr>
<th>Problem-Solving Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw a Picture</td>
</tr>
<tr>
<td>Logical Reasoning</td>
</tr>
<tr>
<td>Act it Out</td>
</tr>
</tbody>
</table>

Solve.

1. Mandy makes 4 snowballs. Sara makes 2 snowballs. How many snowballs do they have in all? 
   
   __________ snowballs

2. Four kids wait in line to use the slide. Chad is third in line. Don is behind Chad. Al is in front of Bob. Bob is second in line. Who is first in line? 
   
   __________ is first in line.

3. Jill draws a picture for her mom. The picture has three circles. Jill starts with a blue circle. She puts a red circle next to the yellow circle. She puts a yellow circle next to the blue circle. Which color is the middle circle? 
   
   __________
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies
Draw a Picture
Logical Reasoning
Act it Out

1. Kyra is feeding eight ducks. Five ducks swim away. How many ducks are left for Kyra to feed?

______ ducks are left

2. Dex does a silly walk. His walk is step, hop, hop, step, hop, hop. How could Dex use A’s and B’s to show the pattern of his silly walk?

_________________________

3. Three children are in line to play kickball. Kim is not second. Cedric will kick after Bob. Bob is not first. In what order will they kick?

_________________________
Reteach

Patterns on a Hundred Chart

Skip counting on a hundred chart makes patterns.

What is the pattern shown? ___________________________

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>100</td>
</tr>
</tbody>
</table>

Use a hundred chart to skip count.


3. Tell what patterns you see in the chart.
Skills Practice
Patterns on a Hundred Chart

Use the hundred chart to skip count.

1. Skip count by 2s.
   30, 32, 34, _____, _____, _____, _____.

2. Skip count by 5s.
   25, 30, 35, _____, _____, _____, _____.

3. Skip count by 10s.
   18, 28, 38, _____, _____, _____, _____.

Use a number pattern to solve.

4. Clint has to make shoes for 16 horses. How many shoes will he make?
   _____ shoes

5. Kayla sees six stars on a poster. Each star has 5 points. How many points are there in all?
   _____ points

6. Erika has to name the pattern on the number chart. What should Erika call this pattern?
   ___________________________
Reteach

Addition Properties

The order of the addends is changed. The sum is the same.

Add 0 to a number. The sum is the same as the other addend.

Find each sum.

1. \[2 + 3 = \_5\] \[3 + 2 = \_5\]

2. \[4 + 0 = \_4\] \[0 + 4 = \_4\]

3. \[3 + 4 = \_\] \[4 + 3 = \_\]

4. \[1 + 8 = \_] \[8 + 1 = \_\]

5. \[5 + 3 = \_\] \[3 + 5 = \_\]

6. \[6 + 5 = \_] \[5 + 6 = \_]
## Skills Practice

### Addition Properties

**Find each sum.**

<p>| | | | | | | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>1.</td>
<td>3</td>
<td>2</td>
<td>+ 2</td>
<td>+ 2</td>
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<td>2.</td>
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<td>+ 7</td>
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<td>+ 4</td>
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<tr>
<td>13.</td>
<td>8 + 3 =</td>
<td>14.</td>
<td>6 + 4 =</td>
<td>15.</td>
<td>3 + 9 =</td>
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<td></td>
<td>3 + 8 =</td>
<td></td>
<td>4 + 6 =</td>
<td></td>
<td>9 + 3 =</td>
<td></td>
</tr>
</tbody>
</table>

### Solve.

16. There are 2 brown frogs. There are 8 green frogs. How many frogs are there? _____ frogs

17. There are 8 spotted turtles. There are 2 striped turtles. How many turtles are there? _____ turtles
Reteach

Count On to Add

You can use squares to count on.


\[ \begin{array}{ccccccc}
1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\
\end{array} \]

\[ 5 + 3 = \boxed{8} \]

Use the squares. Add squares to count on.

1. \[ 8 + 1 = \boxed{9} \]

2. \[ 6 + 2 = \boxed{8} \]

3. \[ 7 + 3 = \boxed{10} \]

4. \[ 5 + 1 = \boxed{6} \]

5. \[ 9 + 3 = \boxed{12} \]

6. \[ 7 + 2 = \boxed{9} \]

7. \[ 6 + 3 = \boxed{9} \]
You can use a number line to add.

Use the number line. Count on to add.

1. \(6 + 1 = \underline{7}\) \(2 + 3 = \underline{5}\) \(4 + 3 = \underline{7}\)

2. \(1 + 7 = \underline{8}\) \(5 + 2 = \underline{7}\) \(6 + 3 = \underline{9}\)

3. \(3 + 9 = \underline{12}\) \(4 + 3 = \underline{7}\) \(7 + 2 = \underline{9}\) \(1 + 6 = \underline{7}\) \(5 + 0 = \underline{5}\) \(2 + 2 = \underline{4}\)

4. \(8 + 3 = \underline{11}\) \(2 + 3 = \underline{5}\) \(2 + 6 = \underline{8}\) \(5 + 1 = \underline{6}\) \(6 + 3 = \underline{9}\) \(0 + 4 = \underline{4}\)

5. \(7 + 3 = \underline{10}\) \(1 + 9 = \underline{10}\) \(8 + 0 = \underline{8}\) \(4 + 2 = \underline{6}\) \(9 + 2 = \underline{11}\) \(3 + 7 = \underline{10}\)

Solve.

6. A frog jumps over 6 rocks. Then he jumps over 2 more. How many rocks does he jump over? _____ rocks

7. A turtle lays 4 eggs. Then she lays 3 more. How many eggs does she lay in all? _____ eggs
Jeff likes to watch birds on the way to school. Today, he saw 5 crows and 12 robins. How many birds did Jeff see?

**Step 1**
**Understand**

**What do I know?**
- Jeff saw 5 crows.
- Jeff saw 12 robins.

**What do I need to find out?**
- How many birds did Jeff see?

**Step 2**
**Plan**

**How will I find how many birds he saw?**
- I can act it out using __________.

**Step 3**
**Solve**

**Act it out**
- I can use red counters to stand for robins.
- I can use white counters for crows.

**Step 4**
**Check**

**Look Back**
- Did I act it out? _____
- Does my answer make sense? _____
Problem-Solving Strategy: Act It Out

Preparation: Counters are needed for this activity.

Solve. Use counters to act it out.

1. Mary sees 1 dog, 4 bees, and 2 swans at the park.
   How many swans does she see?
   ______ swans

2. 7 cars are in the parking lot. 4 cars leave. 2 more come back.
   How many cars are there now?
   ______ cars

3. Mia saw 4 bears at the zoo. She saw 9 bears on TV.
   How many bears did she see in all?
   ______ bears

4. Kat has 5 balloons. 3 are red. The rest are blue.
   How many blue balloons are there?
   ______ blue balloons

5. There are 4 markers in the bin. Rick puts 5 more in the bin.
   How many markers are there altogether?
   ______ markers
Skills Practice

Problem-Solving Strategy: Act It Out

Preparation: Erasers or other manipulatives are needed for this activity.

Solve. Use classroom erasers to act it out.

1. Scott buys all the and erasers.
   How many erasers does he buy in all? ______________

2. Kelly buys all the erasers.
   How many erasers does she have? ______________

3. Sara buys all the erasers. Then she buys all the erasers.
   How many erasers does she have? ______________

4. Ted buys all the and erasers. Then he buys 8 more erasers.
   How many erasers does he have? ______________
Reteach

Doubles

Addends that are the same are called doubles.

\[ 3 + 3 = 6 \]

Add. Use doubles.

1. \[ 4 + 4 = 8 \]
2. \[ 6 + 6 = \]
3. \[ 2 + 2 = \]
4. \[ 5 + 5 = \]
5. \[ 7 + 7 = \]
6. \[ 9 + 9 = \]
Skills Practice

Doubles

Add.

1. \[
\begin{array}{cccccc}
  & 3 & 5 & 4 & 8 & 9 \\
+ & 4 & +7 & +4 & +4 & +0 \\
\end{array}
\]

2. \[
\begin{array}{cccccc}
  & 3 & 4 & 6 & 8 & 6 \\
+ & 3 & +9 & +2 & +8 & +7 \\
\end{array}
\]

3. \[
8 + 3 = \quad \quad 9 + 9 = \quad \quad 7 + 6 = \quad \quad
\]

4. \[
6 + 6 = \quad \quad 7 + 6 = \quad \quad 7 + 7 = \quad \quad
\]

Solve. Write the number sentence.

5. Cameron buys 6 baseball caps. Deb buys the same number of caps. How many caps do they have altogether?
   \[
   \quad + \quad = \quad \text{caps}
   \]

6. Andy has 9 shirts. His brother has an equal number of shirts. How many shirts do the boys have in all?
   \[
   \quad + \quad = \quad \text{shirts}
   \]

7. Circle all of the doubles facts on this page.
Knowing doubles can help you learn other facts.

**Think:** I know $4 + 4 = 8$

**Think:** I know $4 + 5$ is one more than $4 + 4$. $4 + 4 = 8$ so $4 + 5 = 9$.

Find the sum. Use doubles to help.

1. $4 + 4 = 8$

2. $6 + 6 = 12$

3. $4 + 5 = 9$

4. $6 + 5 = 11$

5. $5 + 5$
   $+ 5 + 6$

6. $8 + 8$
   $+ 8 + 9$

7. $6 + 6$
   $+ 6 + 7$

8. $8 + 8$
   $+ 8 + 7$

9. $10 + 10$
   $+ 10 + 9$

10. $7 + 7$
    $+ 7 + 8$
### Skills Practice

**Near Doubles**

Find the sum. Use near doubles to help.

1. \[ \begin{array}{c}
5 &+ 6 \\
6 &+ 6 \\
\hline
12 &+ 6
\end{array} \]

2. \[ \begin{array}{c}
8 &+ 9 \\
9 &+ 9 \\
\hline
17 &+ 8
\end{array} \]

Find the sum. Use doubles and near doubles to help.

3. \[ \begin{array}{c|c}
7+7 &= \_
\hline
one less & one more \\
7+6 &= \_ & 7+8 &= \_
\end{array} \]

4. \[ \begin{array}{c|c}
5+5 &= \_
\hline
one less & one more \\
5+4 &= \_ & 5+6 &= \_
\end{array} \]

5. \[ \begin{array}{c|c}
6+6 &= \_
\hline
one less & one more \\
6+5 &= \_ & 6+7 &= \_
\end{array} \]

6. \[ \begin{array}{c|c}
9+9 &= \_
\hline
one less & one more \\
9+8 &= \_ & 9+10 &= \_
\end{array} \]

7. Annie sees 4 bullfrogs at the lake. Zack sees one less bullfrog than Annie. Write an addition sentence that tells how many bullfrogs they saw.

___ + ___ = ___ bullfrogs

8. Marcy finds 5 ladybugs. Lee finds 1 more ladybug than Marcy. Write an addition sentence that tells how many ladybugs they found.

___ + ___ = ___ ladybugs
2-6

Name

2NS2.2

Reteach

Make 10

You can make 10 to help you add.

Move 1 to make 10.

Now add 10 + 3.

10 + 3 = 13
9 + 4 = 13

Add. Color the counters you use to make 10.

1. \[ 7 + 6 \] can be changed to \[ 10 + 3 \]

2. \[ 8 + 3 \] can be changed to \[ 10 + 1 \]

3. \[ 6 + 9 = \] \[ \] + 10 = \[

4. \[ 8 + 6 = \] \[ ] + 10 + \[ ] = \[

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Skills Practice

Make 10

Add. Use connecting cubes to help.

1. 

\[
\begin{array}{cccc}
8 & + & 6 & = \\
\hline
14 & & &
\end{array}
\]

can be changed to

\[
\begin{array}{cccc}
10 & + & 4 & = \\
\hline
14 & & &
\end{array}
\]

2. 

\[
\begin{array}{cccc}
7 & + & 8 & = \\
\hline
15 & & &
\end{array}
\]

\[
\begin{array}{cccc}
9 & + & 9 & = \\
\hline
18 & & &
\end{array}
\]

\[
\begin{array}{cccc}
8 & + & 4 & = \\
\hline
12 & & &
\end{array}
\]

\[
\begin{array}{cccc}
8 & + & 5 & = \\
\hline
13 & & &
\end{array}
\]

\[
\begin{array}{cccc}
8 & + & 4 & = \\
\hline
12 & & &
\end{array}
\]

3. 

\[7 + 4 = \quad 8 + 8 = \quad 7 + 8 = \quad \]

4. 

\[9 + 7 = \quad 6 + 7 = \quad 8 + 9 = \quad \]

Solve.

5. Ali built 8 model airplanes in October. In November she built 6 model airplanes. How many airplanes has she built in all?

\[8 + 6 = \quad \]

6. Marty learned to play 7 new songs in January. In February, he learned 5 new songs. How many songs has he learned in the two months?

\[7 + 5 = \quad \]
Reteach

Add Three Numbers

You can group addends. You can use doubles or make a 10.

Find a double. Make a 10.

<table>
<thead>
<tr>
<th>Addends</th>
<th>Find a double.</th>
<th>Make a 10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 3 8</td>
<td></td>
<td>6 5 10</td>
</tr>
<tr>
<td>+ 4 + 3</td>
<td></td>
<td>+ 4 + 5</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Find a double. Circle addends that make doubles. Add.

1. 3 1 6
   3 1 6
   + 7 + 7
   1 3

2. 8 1 0
   2 1 0
   + 4 + 4
   4 4

Make a 10. Circle addends that make a 10. Add.

2. 8 3 1 1 9 10 7 10 6 10
   2 1 0
   + 4 + 4
   3 1 0

Find the sum.

3. 8 8 9 18 2 8
   3 1 6
   + 8 + 1 + 2 + 8 + 8
   1 6

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Find each sum.

1. 3 4 8 4 5 9
   2 5 0 3 4 1
   + 3 + 0 2 4 + 6 + 5
   __________
   8

2. 4 7 9 8 7 5
   8 6 1 3 3 5
   + 2 + 6 + 4 + 8 + 6 + 5
   __________
   ___

3. 4 3 0 2 8 3
   6 5 7 4 2 6
   + 8 + 3 + 7 + 8 + 3 + 7
   __________
   ___

4. 6 4 8 5 1 3
   5 4 2 3 9 8
   + 6 + 7 + 4 + 5 + 6 + 2
   __________

Solve.

5. Jan has 4 stamps. Tim has 9 stamps. Ben has 4 stamps. How many total stamps do they have?
   ______ stamps

6. There are 4 bear stickers, 6 wolf stickers, and 8 fox stickers. How many stickers are there in all?
   ______ stickers
Reteach (1)  

Problem-Solving Investigation: Choose a Strategy

1. Jen: It takes me 10 minutes to clean my room.  
   It takes me 2 minutes to brush my teeth.  
   It takes me 5 minutes to change my clothes.  
   How long will it take me to get ready for bed?

Choose a strategy to solve.

**Step 1**
Understand

What do I know?
- First step takes 10 minutes.
- Next step takes 2 minutes.
- Last step takes 5 minutes.

What do I need to find?
How much time in all will it take?

**Step 2**
Plan

How will I find how much time?
I can **draw a picture**.

**Step 3**
Solve

Draw a picture.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>Teeth</td>
<td>Change</td>
</tr>
</tbody>
</table>

Jen will take 17 minutes.

**Step 4**
Check

Did I draw a picture showing three parts? **yes**

Does my answer make sense? **yes**
Choose a strategy and solve.

1. Candy, Dennis, and Serena are trading CDs. Candy gives 6 CDs to Serena and 5 CDs to Dennis. She has 6 CDs left over.

How many CDs did she start with?
____ CDs

2. Keith has 4 drums. Shawn has the same number of drums.

How many drums do they have in all?
____ drums


How many songs did they play?
____ songs

4. The band practices 6 hours a week. There was a 3-hour practice on Monday.

How many hours are left to practice this week?
____ hours
Solve. Choose a strategy.

1. Mrs. Adler washes 4 sweaters on Monday. On Tuesday, Mr. Adler washes one less sweater.
   How many sweaters have the Adlers washed in all?
   _____ sweaters

2. Ken has 2 blue shirts, 3 white shirts, and 7 striped shirts.
   How many total shirts does he have?
   _____ shirts

3. Linda is sewing beads onto her favorite hat. She uses 4 silver beads, 4 clear beads, and 6 gold beads.
   How many beads in all does Linda use?
   _____ beads

4. Together, Ike and Mike have 10 pairs of shoes.
   How many shoes are there in all?
   _____ shoes

5. Ivan is cleaning out a closet. He finds 4 hats. His sister finds one more hat than Ivan found.
   How many hats did they find altogether?
   _____ hats
Reteach

Name ________________________

Count Back to Subtract

Count back to subtract.

8 − 2 = 6

10 − 4 = 6

Count back to subtract. Show how you use □ to help.

1. □□□□□□□□□
   7 − 4 = 3

2. □□□□□□□□□□□□□□□□□
   9 − 0 = 9

3. □□□□□□□□□□□□□□□□□
   9 − 9 = 0

4. □□□□□
   5 − 1 = ______

5. □□□□□
   6 − 2 = ______

6. □□□□□□□□□
   9 − 4 = ______

7. □□□□□□□□□□□□□□□
   8 − 6 = ______

8. □□□□□□□
   4 − 3 = ______

9. □□□□□□□□□
   7 − 3 = ______
Skills Practice

Count Back to Subtract

Count back to subtract.
Use the number line.

0 1 2 3 4 5 6 7 8 9 10 11 12

1. \(12 - 4 = \) ______  \(11 - 3 = \) ______  \(7 - 1 = \) ______

2. \(8 - 3 = \) ______  \(6 - 2 = \) ______  \(10 - 2 = \) ______

3. \(9 - 1 = \) ______  \(7 - 3 = \) ______  \(12 - 3 = \) ______

4. \(8 - 1 = \) ______  \(11 - 2 = \) ______  \(8 - 2 = \) ______

5. \(\) ______ = \(10 - 1\)  \(\) ______ = \(7 - 2\)  \(\) ______ = \(10 - 3\)

Solve.

6. There are 9 dogs playing at the dog park. 3 dogs go home. How many dogs are left? ______ dogs

7. There are 11 lions and 2 tigers at the zoo. How many more lions than tigers are at the zoo? ______ lions
Subtract All and Subtract Zero

Subtract 0. Subtract all.
You have the same number left.

Subtract. You can cross out pictures to help.

1. 

\[ 9 - 0 = \_9 \]
\[ 9 - 9 = \_0 \]

2. 

\[ 6 - 0 = \_\]
\[ 6 - 6 = \_\]

3. 

\[ 4 - 0 = \_\]
\[ 4 - 4 = \_\]

4. 

\[ 7 - 0 = \_\]
\[ 7 - 7 = \_\]

5. 

\[ 8 - 0 = \_\]
\[ 8 - 8 = \_\]

6. 

\[ 5 - 0 = \_\]
\[ 5 - 5 = \_\]
Skills Practice

Subtract All and Subtract Zero

Subtract.

1. \[
\begin{array}{cccc}
7 & 9 & 8 & 10 \\
-1 & -0 & -8 & -2
\end{array}
\]

2. \[
\begin{array}{cccc}
6 & 9 & 6 & 8 \\
-6 & -3 & -0 & -1
\end{array}
\]

3. \[
\begin{array}{cccc}
9 & 7 & 9 & 10 \\
-1 & -7 & -2 & -1
\end{array}
\]

4. \[
\begin{array}{cccc}
8 & 9 & 7 & 8 \\
-3 & -9 & -2 & -0
\end{array}
\]

Solve.

5. 10 children play ball.
   After they finish, all 10 go back to class.
   How many children keep playing ball?
   _____ children

6. 8 girls take a walk.
   When they reach the park, they all keep walking.
   How many girls are still taking a walk?
   _____ girls
Reteach

Use Doubles to Subtract

You can use doubles facts to subtract.

Remember, doubles are addends that are the same number.

If you know $6 + 6 = 12$, you know $12 - 6 = \underline{6}$

Subtract. Use doubles facts to help.

1. $4 + 4 = \underline{8}$, so $8 - 4 = \underline{4}$

2. $7 + 7 = \underline{14}$, so $14 - 7 = \underline{7}$

3. $3 + 3 = \underline{6}$, so $6 - 3 = \underline{3}$

4. $5 + 5 = \underline{10}$, so $10 - 5 = \underline{5}$

5. $8 + 8 = \underline{16}$, so $16 - 8 = \underline{8}$

6. $9 + 9 = \underline{18}$, so $18 - 9 = \underline{9}$
Skills Practice
Use Doubles to Subtract

Subtract. Circle any problems in which you can use doubles to subtract.

1. \[ \begin{array}{cccccc}
7 & 12 & 4 & 8 & 11 \\
-7 & -6 & -0 & -3 & -3 \\
\end{array} \]

2. \[ \begin{array}{cccccc}
10 & 4 & 8 & 8 & 7 \\
-5 & -2 & -4 & -0 & -7 \\
\end{array} \]

3. \[ 7 - 3 = \quad 18 - 9 = \quad 7 - 7 = \quad \]

4. \[ 16 - 8 = \quad 10 - 3 = \quad 14 - 7 = \quad \]

Solve.

5. Shaun buys 10 erasers. He gives 5 erasers to Fred. How many erasers does Shaun have left? What doubles fact can help you?
   \[ \begin{array}{cccccc}
   \text{_____} + \text{_____} = \text{_____} \\
   \text{Write a number sentence to find how many erasers Shaun has left.} \\
   \text{_____} - \text{_____} = \text{_____} \\
   \text{_____} \text{ erasers are left} \\
   \end{array} \]

6. Sylvia has 6 markers. She gives 3 markers to Clarice. How many markers does Sylvia have left? What doubles fact can help you?
   \[ \begin{array}{cccccc}
   \text{_____} + \text{_____} = \text{_____} \\
   \text{Write a number sentence that tells how many markers are left.} \\
   \text{_____} - \text{_____} = \text{_____} \\
   \text{_____} \text{ markers are left} \\
   \end{array} \]
There are 5 dogs. How many legs are there in all?

**Step 1**

**Understand**

Be sure you understand the problem.

What do you know?
- There are \( \frac{4}{1} \) legs on a dog.
- There are 5 dogs.

What do you need to find out?
- I need to find how many legs in all.

**Step 2**

**Plan**

Make a plan.

Choose a strategy from the list.

- Draw a Picture
- Make a Table
- Guess and Check
- Find a Pattern
- Make a List

If you know how many legs one dog has, you can use a pattern to figure out how many legs 2 dogs have. Then, you can keep the pattern going.

**Step 3**

**Solve**

Carry out your plan. Make a chart.

<table>
<thead>
<tr>
<th>Number of dogs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of legs</td>
<td>( \frac{4}{1} )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are _____ legs in all.

**Step 4**

**Check**

Look back.

Does my answer make sense? Yes No
Solve.

1. Sam and Andy are stacking blocks. They add blocks 4 at a time. If it does not fall, how high will the stack be after each boy takes 3 turns?

<table>
<thead>
<tr>
<th></th>
<th>Sam</th>
<th>Andy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Blocks</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The stack will be _____ blocks high.

2. Antonio works on his spelling. These are his scores for the last 5 tests. If this pattern continues for 8 tests, what will Antonio’s highest score be?

<table>
<thead>
<tr>
<th>Test</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Antonio’s highest score will be _____.

3. Rachel’s school bus takes 14 children home. Two children get off at each stop. If this pattern continues, how many stops will it take until there are no more children on the bus?

<table>
<thead>
<tr>
<th>Stop</th>
<th>School</th>
<th>Children still on bus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

There are no more children on the bus after _____ stops.
Skills Practice

Problem-Solving Strategy: Find a Pattern

Find a pattern to solve.

1. One week Max rides his bike 2 miles. Week two he rides 6 miles. Week three he rides 10 miles. In week four, he rides 14 miles. If this pattern continues, how many miles does he ride during week 7?

<table>
<thead>
<tr>
<th>week</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>miles</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Max rides _____ miles.

2. A coach orders shirts for the team. The numbers on the first four shirts are 02, 04, 06, and 08. If the pattern stays the same, what will be the numbers on the next three shirts?

<table>
<thead>
<tr>
<th>shirt</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>02</td>
<td>04</td>
<td>06</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The shirts have numbers _____, _____, and _____.

3. Nell writes numbers on cards and asks her sister to help her with the pattern. So far, the numbers on the cards are 17, 15, 13, 11. If the pattern stays the same, what will the next three cards be?

| cards | 17 | 15 | 13 | 11 |   |   |   |

The next three cards will be _____, _____, and _____.

2SDAP2.1, 2MR1.0
Reteach
Relate Addition to Subtraction

These addition and subtraction facts have the same three numbers.

Use addition facts to subtract.

1. \[ 4 + 7 = \underline{11} \]
   \[ 11 - 7 = \underline{4} \]

2. \[ 3 + 6 = \underline{9} \]

3. \[ 9 + 3 = \underline{12} \]
   \[ 12 - 3 = \underline{9} \]

4. \[ 2 + 5 = \underline{7} \]

5. \[ 2 + 8 = \underline{10} \]
   \[ 10 - 2 = \underline{8} \]

6. \[ 1 + 6 = \underline{7} \]
   \[ 7 - 6 = \underline{1} \]
Use addition facts to subtract.

1. \(8 + 5 = \underline{13}\)  \(6 + 8 = \underline{14}\)  \(6 + 7 = \underline{13}\)
   \(13 - 5 = \underline{8}\)  \(14 - 8 = \underline{6}\)  \(13 - 7 = \underline{6}\)

2. \(4 + 9 = \underline{13}\)  \(8 + 8 = \underline{16}\)  \(6 + 9 = \underline{15}\)
   \(13 - 4 = \underline{9}\)  \(16 - 8 = \underline{8}\)  \(15 - 6 = \underline{9}\)

3. \(3 + 11 + 4 + 12 + 7 + 14\)
   \(+8 - 8 + 8 - 8 + 7 - 7\)

4. \(8 + 7 + 9 + 7 + 8 + 9\)
   \(15 - 8 + 16 - 9 + 17 - 8\)

5. \(5 + 9 + 3 + 9 + 9\)
   \(14 - 5 + 12 - 3 + 18 - 9\)

Solve.

6. There are 16 stamps. Pete uses 8 of the stamps. How many stamps are left?
   \(\underline{8}\) stamps

7. Megan writes 4 letters on Monday. She writes 9 letters on Tuesday. How many letters does Megan write?
   \(\underline{13}\) letters
Reteach
Missing Addends

9 + □ = 14

Write a related fact.
14 - 9 = □
so, 9 + □ = 14.

Find the missing addend. Draw pictures to help.

1. 8 + □ = 12
12 - 8 = □

2. 7 + □ = 12
12 - 7 = □

3. 5 + □ = 13
13 - 5 = □

4. 9 + □ = 17
17 - 9 = □

5. 8 + □ = 14
14 - □ = 8
Find each missing addend.

1. \(3 + \square = 12\)  \(14 - 7 = \square\)  \(\square + 8 = 14\)

2. \(4 + 7\)  \(12 - \square\)  \(6 + 9\)  \(14 - 8\)  \(7 + 7\)  \(15 - 7\)

3. \(\square + 5\)  \(16 - 8\)  \(6 + 7\)  \(17 - 8\)  \(\square + 9\)  \(14 - 9\)

4. \(7 + \square\)  \(11 - 5\)  \(\square + 8\)  \(18 - 9\)  \(\square + 4\)  \(15 - 8\)

5. \(\square + 4\)  \(10 - 4\)  \(6 + 6\)  \(16 - 7\)  \(\square + 17\)  \(16 - 9\)

Solve.

6. Jeff has 9 stamps. He gets 3 more. How many stamps does he have now?
   _____ stamps

7. Gina has 15 postcards. 7 are from the United States. How many are not from the United States?
   _____ postcards
Name ____________________________________________

3-7

Reteach

Fact Families

Some fact families have two addition facts and two subtraction facts.

\[
\begin{align*}
9 + 7 &= 16 & 16 - 7 &= 9 \\
7 + 9 &= 16 & 16 - 9 &= 7
\end{align*}
\]

Some fact families have one addition fact and one subtraction fact.

\[
\begin{align*}
8 + 8 &= 16 & 16 - 8 &= 8
\end{align*}
\]

Complete each fact family.

1. \[
\begin{align*}
9 + 4 &= 13 & 13 - 9 &= 4 \\
4 + 9 &= 13 & 13 - 4 &= 9
\end{align*}
\]

2. \[
\begin{align*}
6 + 5 &= \_\_\_ & 11 - 5 &= \_\_\_
\end{align*}
\]

3. \[
\begin{align*}
9 + 8 &= \_\_\_ & 17 - 9 &= \_\_\_
\end{align*}
\]

4. \[
\begin{align*}
7 + 7 &= \_\_\_ & 14 - 7 &= \_\_\_
\end{align*}
\]
Skills Practice
Fact Families

Complete each fact family.

1.  
   \[
   \begin{align*}
   8 + 6 & = 14 \\
   6 + 8 & = 14 \\
   14 - 8 & = 6 \\
   14 - 6 & = 8 \\
   \end{align*}
   \]

2.  
   \[
   \begin{align*}
   9 + 4 & = 13 \\
   4 + 9 & = 13 \\
   13 - 9 & = 4 \\
   13 - 4 & = 9 \\
   \end{align*}
   \]

3.  
   \[
   \begin{align*}
   8 + 9 & = 17 \\
   9 + 8 & = 17 \\
   17 - 8 & = 9 \\
   17 - 9 & = 8 \\
   \end{align*}
   \]

4.  
   \[
   \begin{align*}
   5 + 8 & = 13 \\
   8 + 5 & = 13 \\
   13 - 5 & = 8 \\
   13 - 8 & = 5 \\
   \end{align*}
   \]

5.  
   \[
   \begin{align*}
   14 + 7 & = 21 \\
   14 - 7 & = 7 \\
   \end{align*}
   \]

6.  
   \[
   \begin{align*}
   18 + 9 & = 27 \\
   18 - 9 & = 9 \\
   \end{align*}
   \]

Solve. Write the number sentences in the fact family.

7. Lucas has 7 toy cars and 8 toy trucks. He has 15 toys in all.
   Write the number sentences in the fact family.

   \[
   \begin{align*}
   7 + 8 & = 15 \\
   8 + 7 & = 15 \\
   15 - 7 & = 8 \\
   15 - 8 & = 7 \\
   \end{align*}
   \]
Name ____________________

Reteach (1) 2AF1.2, 2MR1.1

Problem-Solving Investigation: Choose a Strategy

1. Kim’s mom makes 13 blueberry pancakes. Kim eats some. There are 9 pancakes left when she finishes. How many pancakes did Kim eat?

Choose a problem-solving strategy to solve.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Understand</th>
<th>What do you know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mom makes <em><strong>13</strong></em> pancakes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em><strong>9</strong></em> pancakes are left.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What do I need to find?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many pancakes <em><strong>Kim</strong></em> ate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How will I find how many Kim ate?</td>
</tr>
<tr>
<td></td>
<td>I can write a <em><strong>number sentence</strong></em>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Solve</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13 - 9 = ____</td>
</tr>
<tr>
<td></td>
<td>Kim ate ____ pancakes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Did I write a number sentence? <em>yes</em></td>
</tr>
<tr>
<td></td>
<td>Does my answer make sense? <em>yes</em></td>
</tr>
</tbody>
</table>
Reteach (2)  2AF1.2, 2MR1.1

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies
Find a Pattern
Logical Reasoning
Write a Number Sentence

Solve.

1. Kyra has 17 stickers. She loses 9 stickers. How many stickers does she have left?  
   Kyra has _____ stickers.

2. Julia makes a pattern with stars.

   row 1
   row 2
   row 3
   row 4
   row 5

   If the pattern continues, how many stars will be in row 8?  
   _____ stars

3. Eldon had 15 fish. He gave some to his brother. Now Eldon has 6 fish.  
   How many fish did Eldon give to his brother?  
   _____ fish
Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies
Find a Pattern
Logical Reasoning
Write a Number Sentence

Solve.

1. At the toy store there are 3 toys on the top shelf. Six toys are on shelf two. Nine toys are on shelf 3. If the pattern continues, how many toys will be on shelf 6?
   ______ toys.

2. There are 20 toys in the store window. Five toys are trains. Four toys are dolls. Six toys are airplanes. The rest of the toys are games. How many toys are games?
   ______ games

3. Three children are in line to pay for toys. Anna is not second. Ben is in line after Juan. Juan is not first. In what order will the children pay for their toys?
   ______; ______; ______
**Use the survey to answer each question.**

Look at your classmates. Make one tally mark to record what each classmate is wearing. Complete the chart.

<table>
<thead>
<tr>
<th>Clothes in the Classroom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeans</td>
<td></td>
</tr>
<tr>
<td>Sweaters</td>
<td></td>
</tr>
<tr>
<td>T-Shirts</td>
<td></td>
</tr>
<tr>
<td>Skirts</td>
<td></td>
</tr>
</tbody>
</table>

1. How many students are wearing sweaters?  
   ____________________________

2. How many students are wearing t-shirts?  
   ____________________________

3. Which got more tallies, jeans or skirts?  
   ____________________________

4. What item of clothing is worn the least?  
   ____________________________

5. What item of clothing is worn the most?  
   ____________________________
Use the survey to answer each question.

Ask classmates which hobby they like best. Use tally marks to record their answers. Complete the chart.

<table>
<thead>
<tr>
<th>Favorite Hobby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
</tr>
<tr>
<td>Building Models</td>
</tr>
<tr>
<td>Painting</td>
</tr>
<tr>
<td>Playing Music</td>
</tr>
</tbody>
</table>

1. How many tally marks did playing music get?
   __________________________

2. Which hobby has the most tally marks?
   __________________________

3. Wes is starting a Craft Club. He wants to invite the students who like building models or painting. Write a number sentence to show how many students Wes should invite.
   
   + = __________________________

4. Sue wants to add cooking to the chart. Three students decide to change their vote from playing music to cooking. How many tallies are left for playing music?
   __________________________
The picture graph shows the votes for favorite sport.

### Favorite Sport

<table>
<thead>
<tr>
<th>Baseball</th>
<th>Basketball</th>
<th>Soccer</th>
</tr>
</thead>
<tbody>
<tr>
<td>⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️</td>
<td>⬜️ ⬜️ ⬜️ ⬜️</td>
<td>⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️ ⬜️</td>
</tr>
</tbody>
</table>

Use the picture graph. Fill in the pictograph below.

### Favorite Sport

<table>
<thead>
<tr>
<th>Sport</th>
<th>Favorite Sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td></td>
</tr>
<tr>
<td>Basketball</td>
<td></td>
</tr>
<tr>
<td>Soccer</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each 🎾 stands for 2 votes.

1. How many more students voted for baseball than for basketball?
   _____ more students

2. Which sport is the favorite? _________

3. How many students voted in all? _____
Skills Practice

Picture Graphs

Some students voted for their favorite book. Show their tally chart as a pictograph. Use the graph to answer each question.

**Favorite Book**

<table>
<thead>
<tr>
<th>Favorite Book</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space Raiders</td>
<td>HHH</td>
</tr>
<tr>
<td>Beneath the Sea</td>
<td>HHH H</td>
</tr>
<tr>
<td>House in the Woods</td>
<td>HHH H</td>
</tr>
<tr>
<td>Puppet Street</td>
<td>HHH</td>
</tr>
</tbody>
</table>

**Favorite Book**

<table>
<thead>
<tr>
<th>Favorite Book</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space Raiders</td>
<td></td>
</tr>
<tr>
<td>Beneath the Sea</td>
<td></td>
</tr>
<tr>
<td>House in the Woods</td>
<td></td>
</tr>
<tr>
<td>Puppet Street</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each 📚 stands for 2 votes.

1. How many children voted for *House in the Woods*? _____

2. How many more children voted for *Puppet Street* than voted for *Beneath the Sea*? _____

3. How many children in all voted for *Space Raiders* and *Puppet Street*? _____

4. Lila wants to read the book with the least votes. Which book should she read? __________________

5. Rick, Tom, and Cindy like *Space Raiders* the best. If their votes are added to the survey, will *Space Raiders* have the most votes? _____
How many stuffed animals does Ella have?

**Ella’s Toy Collection**

<table>
<thead>
<tr>
<th>Bears</th>
<th>Mice</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>

**Problem-Solving Strategy: Write a Number Sentence**

**Step 1** Understand

**What do I know?**
- Bears are stuffed.
- Mice are stuffed.

**What do I need to find?**
- How many bears and mice are there in all?

**Step 2** Plan

**What can I do?**
- I will write a number sentence to add the bears and mice.

**Step 3** Solve

**Write a number sentence.**

_____ bears + _____ mice = _____ stuffed animals

**Step 4** Check

Are there 13 stuffed animals shown in the chart?

_____
Problem-Solving Strategy: Write a Number Sentence

Use the graphs to answer the questions. Write a number sentence to solve.

Ms. Garcia’s Shopping List

<table>
<thead>
<tr>
<th>Vegetables</th>
<th>Graph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomatoes</td>
<td>🍅ocado 🍅ocado 🍅ocado</td>
</tr>
<tr>
<td>Potatoes</td>
<td>🍔obe 🍔obe</td>
</tr>
<tr>
<td>Chickens</td>
<td>🐔cken 🐔cken 🐔cken</td>
</tr>
</tbody>
</table>

1. How many vegetables will Ms. Garcia buy?
   _____ tomatoes   _____ potatoes = _____ vegetables

2. How many more of Nate’s stamps are from Japan than are from Mexico?
   _____ from Japan  _____ from Mexico
   _____ ○ _____ = _____ more stamps

3. How many stamps are from either Italy or Mexico?
   _____ from Italy  _____ from Mexico
   _____ ○ _____ = _____ stamps
Use the graph. Write a number sentence to solve.

Number of Animals at Pablo’s Pets

<table>
<thead>
<tr>
<th>Animal</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parrots</td>
<td></td>
</tr>
<tr>
<td>Snakes</td>
<td></td>
</tr>
<tr>
<td>Lizards</td>
<td></td>
</tr>
</tbody>
</table>

1. How many more lizards than snakes?
   _____ − _____ = _____

2. Pablo takes a photo of each parrot and each snake. How many photos does Pablo take?
   _____ + _____ = _____ photos

Evans Family Recycling

<table>
<thead>
<tr>
<th>Item</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td></td>
</tr>
<tr>
<td>Plastic</td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each ♻ stands for 2 items.

3. How many more paper items than glass items?
   _____ − _____ = _____

4. The Evans family can put plastic and glass items in the same bin. How many items are in this bin?
   _____ + _____ = _____ items

5. Jim knows his family recycles twice as much paper as the Evans family does. How many paper items does Jim’s family recycle?
   _____ + _____ = _____ paper items
Name ____________________________

4-4
Reteach
Bar Graphs

Preparation: Crayons are needed for this activity.

Bar graphs use bars to show data. You can make a bar graph with data you read. Read the data to complete the bar graph.

<table>
<thead>
<tr>
<th>Favorite Fruit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
</tr>
<tr>
<td>Bananas</td>
</tr>
<tr>
<td>Oranges</td>
</tr>
<tr>
<td>Pears</td>
</tr>
</tbody>
</table>

Data:
Four people voted for apples. Show this on the bar graph.
Five people voted for oranges. Show this on the bar graph.
Two people voted for pears. Show this on the bar graph.
Three people voted for bananas. Show this on the bar graph.

Answer each question.

1. What is the title of this bar graph? ________________________
2. How many kinds of fruit are shown in the bar graph? _____
3. How many votes did apples get? _____
4. What is the favorite fruit? ________________

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Skills Practice

Bar Graphs

Preparation: Crayons are needed for this activity.

Use data from the chart to make a bar graph. Color one space for each vote. Then answer each question.

<table>
<thead>
<tr>
<th>Favorite Bird</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Jay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Which bird got the most votes? __________

2. How many more students voted for the robin than the swan? _____

3. How many votes for blue jays does the graph show? _____

4. How many students voted in all? _____
Reteach

Different Ways to Show Data

You can show the same data different ways. You can use the data on one graph to make more graphs. Count how many tallies to help.

<table>
<thead>
<tr>
<th>Favorite Meal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>####</td>
</tr>
<tr>
<td>Lunch</td>
<td>######</td>
</tr>
<tr>
<td>Dinner</td>
<td>###</td>
</tr>
</tbody>
</table>

1. Use the data from the tally chart to make the pictograph.

<table>
<thead>
<tr>
<th>Favorite Meal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td></td>
</tr>
</tbody>
</table>

Key: Each 😊 stands for 1 vote.

2. Use the data from the pictograph to color the bar graph.

<table>
<thead>
<tr>
<th>Favorite Meal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td></td>
</tr>
</tbody>
</table>
**Skills Practice**

Different Ways to Show Data

**Preparation:** Crayons are needed for this activity.

Use the tally chart. Make a pictograph and a bar graph to show the data. Then answer the questions.

<table>
<thead>
<tr>
<th>Our Favorite Dinner</th>
<th>Food</th>
<th>Tally</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaghetti</td>
<td>Spaghetti</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Soup</td>
<td>Soup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taco</td>
<td>Taco</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key:** Each 🍳 stands for 2 votes.

1. Which dinner got the most votes? _______
2. Which dinner got the fewest votes? _______
3. How many students voted? _______
4. How many more students chose tacos than soup? _______
5. Kim lists the dinners from least favorite to most favorite. What dinner is second on her list? ___________
Range and mode are ways to talk about data. Data is information. Looking at data in a simple way can help you find the range and mode.

Mrs. Lee’s class did a survey about TVs in the home.

Use the graphs to find mode and range.

1. On both graphs, circle the number of TVs you see most often.
   
   This number is the **mode. _____ is the mode.**

2. Look at the graph. Write the greatest number of TVs a family has: _____
   
   Write the least number of TVs a family has: _____
   
   The **range** is the difference between these numbers. Write a number sentence to find the **range**: _____ – _____ = _____
   
   The **range** is _____.
Skills Practice

Range and Mode

Norah has recorded how many people can sit at each table in her cafe. The data shows how many of each table she has. Find the mode. Find the range.

<table>
<thead>
<tr>
<th>Norah’s Cafe Seating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Seats</td>
</tr>
<tr>
<td>Number of Tables</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Seats at Each Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

Use the graph to solve.

1. Put the data in order from least to greatest.

2. Circle the **mode** on the graph. Write the mode. ______

3. Find the **range**. Write a number sentence to solve.
   ______ − ______ = ______
Reteach (1)

Problem-Solving Investigation: Choose a Strategy

Aaron has 3 muffin pans. Each pan can hold 6 muffins. How many muffins can Aaron bake?

Understand

What do I know?
Aaron has 3 pans. Each pan holds 6 muffins.

What do I need to find out?
How many muffins can Aaron bake?

Plan

How will I find how many?
I can make a table. A table can show both drawings and numbers clearly.

Solve

<table>
<thead>
<tr>
<th>Number of Pans</th>
<th>Number of Muffins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

Aaron can bake _____ muffins.

Check

Look back.
Did I use the table to find out how many? **yes**
Name ________________________

**4-7**

**Reteach (2)**

*Problem-Solving Investigation: Choose a Strategy*

**Solve.**

**Problem-Solving Strategies**
- Draw a Picture
- Find a Pattern
- Make a Table

**Show your work here.**

1. Jake is making up a new dance. He hops, hops, turns, hops, hops, and turns. What do you think he will do next?

2. 3 turtles can fit in 1 tank. Jose has 3 tanks. How many turtles can he have?

3. Joy brings 7 treats for the class. Jessie brings 14 treats. How many more treats did Jessie bring than Joy?

4. Jin, Jack, and Julia want to feed the birds. They each bring 2 bags of seed. How many bags of seed are there in all?
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Solve.

Problem-Solving Strategies
Draw a Picture
Find a Pattern
Make a Table

Show your work here.

1. Shandra is giving a treat bag to each of her 3 friends. She puts 4 pear slices in each bag. How many pear slices are there in all?
   _____ pear slices

2. Liam is writing the number of eggs his hens have. One hen has 2 eggs. 2 hens have 4 eggs. 3 hens have 6 eggs. Liam guesses that 4 hens will have 8 eggs. Is this a good guess? _____

   How many snowmen can they make? _____
Name __________________________

Reteach

Add Tens

You can use $2 + 4 = 6$
to add
$20 + 40 = 60$.

Add. Use the addition facts and counters to help.

1. 

\[
\begin{array}{c}
\text{3 tens} \\
+ \ \\
\text{1 ten}
\end{array}
\]

$3 \text{ tens} + 1 \text{ ten} = ____ \text{ tens}$

$30 + 10 = ____$

2. 

\[
\begin{array}{c}
\text{2 tens} \\
+ \ \\
\text{5 tens}
\end{array}
\]

$2 \text{ tens} + 5 \text{ tens} = ____ \text{ tens}$

$20 + 50 = ____$

3. 

\[
\begin{array}{c}
\text{3 tens} \\
+ \ \\
\text{6 tens}
\end{array}
\]

$3 \text{ tens} + 6 \text{ tens} = ____ \text{ tens}$

$30 + 60 = ____$

4. 

\[
\begin{array}{c}
\text{4 tens} \\
+ \ \\
\text{4 tens}
\end{array}
\]

$4 \text{ tens} + 4 \text{ tens} = ____ \text{ tens}$

$40 + 40 = ____$

5. 

\[
\begin{array}{c}
\text{3 tens} \\
+ \ \\
\text{2 tens}
\end{array}
\]

$3 \text{ tens} + 2 \text{ tens} = ____ \text{ tens}$

$30 + 20 = ____$

6. 

\[
\begin{array}{c}
\text{7 tens} \\
+ \ \\
\text{1 ten}
\end{array}
\]

$7 \text{ tens} + 1 \text{ ten} = ____ \text{ tens}$

$70 + 10 = ____$
Add.

1. \(6 \text{ tens} + 3 \text{ tens} = \Box \text{ tens}\) \quad 3 \text{ tens} + 2 \text{ tens} = \Box \text{ tens}\)
   \[60 + 30 = \Box\] \quad \[30 + 20 = \Box\]

2. \[
\begin{array}{cccccc}
30 & 50 & 20 & 10 & 60 \\
+40 & +20 & +30 & +70 & +10 \\
\end{array}
\]

3. \[
\begin{array}{cccccc}
30 & 40 & 20 & 70 & 40 \\
+50 & +20 & +60 & +20 & +40 \\
\end{array}
\]

4. \[
\begin{array}{cccccc}
50 & 10 & 30 & 40 & 80 \\
+10 & +20 & +30 & +50 & +10 \\
\end{array}
\]

Solve.

5. Bob sees 10 trees near his school. He sees 20 trees at the park. How many trees does he see in all?
   \[\Box \text{ trees}\]

6. There are 30 kids swimming at the pool. There are 40 kids swimming at the beach. How many kids are swimming in all?
   \[\Box \text{ kids}\]
Count on to add. Use the hundred chart to help.

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
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<td>18</td>
<td>19</td>
<td>20</td>
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<td>30</td>
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<td>31</td>
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<td>51</td>
<td>52</td>
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<td>91</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>100</td>
</tr>
</tbody>
</table>

Count on by tens to add. 45, 55, 65

Count on by ones to add. 21, 22, 23

Count on to add. Write the sum.

1. 18 + 30 = _____  Count by tens. 18, 28, 38, _____
2. 31 + 4 = _____  Count by ones. 31, 32, 33, _____, _____
3. 65 + 3 = _____  4. 37 + 20 = _____
5. 57 + 10 = _____  6. 41 + 40 = _____
7. 21 + 8 = _____  8. 36 + 3 = _____
9. 43 + 50 = _____  10. 62 + 7 = _____
Skills Practice
Count On Tens and Ones

Count on to add. Write the sum.

1. $43 + 20 = \underline{}$
2. $18 + 40 = \underline{}$
3. $62 + 10 = \underline{}$
4. $20 + 49 = \underline{}$
5. $35 + 10 = \underline{}$
6. $44 + 40 = \underline{}$

35 + 30 = \underline{}
51 + 10 = \underline{}
40 + 28 = \underline{}
80 + 44 = \underline{}
30 + 13 = \underline{}
60 + 18 = \underline{}

Solve.

7. There are 30 children in the second grade. There are 45 children in the third grade. How many children are there in all?

8. The school gets 40 new math books. They also get 32 new spelling books. How many new books do they have now?

\underline{} children
\underline{} books
Reteach (1)  
Problem-Solving Strategy: Work Backward

Mike scores 10 more points than Sara.  
Sara scores 5 more points than Des does.  
Des scores 6 points.  
How many points does Mike score?

<box>(121,466),(874,897)\

<table>
<thead>
<tr>
<th>Step 1</th>
<th>What do I know?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understand</strong></td>
<td>Mike scores <em><strong>10</strong></em> more points than Sara.</td>
</tr>
<tr>
<td></td>
<td>Sara scores <em><strong>5</strong></em> more points than Des.</td>
</tr>
<tr>
<td></td>
<td>Des scores <em><strong>6</strong></em> points.</td>
</tr>
</tbody>
</table>

What do I need to find?  
• How many ___points___ Mike scores.

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I know how many points Des scores, so I can start there and work <em><strong>backward</strong></em></strong>.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Work backward.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solve</strong></td>
<td>Des scores 6 points. Sara scores 5 more than Des.</td>
</tr>
<tr>
<td></td>
<td>Sara scores <em><strong>6</strong></em> + <em><strong>5</strong></em> = <em><strong>11</strong></em> points.</td>
</tr>
<tr>
<td></td>
<td>Mike scores 10 more than Sara.</td>
</tr>
<tr>
<td></td>
<td>Mike scores <em><strong>11</strong></em> + <em><strong>10</strong></em> = <em><strong>21</strong></em> points.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Does my answer make sense?</strong></td>
<td>Yes</td>
</tr>
</tbody>
</table>
Work backward to solve.

1. Serena wins seven more games than Lex does. Lex wins five more games than Maria does. Maria wins six games. How many games does Serena win?
   _____ games

2. In a hot dog eating contest, Yoshi eats 10 more hot dogs than Eli does. Eli eats 6 more hot dogs than Maury. Maury eats 8 hot dogs. How many hot dogs does Yoshi eat?
   _____ hot dogs

3. In a beanbag toss, Ruby scores 40 more points than Clare. Clare scores 30 more points than Anna, and Anna scores 20 points. How many points does Ruby score?
   _____ points

4. At the zoo today, forty more people watch the lions than the bears. Twenty more people watch the bears than the seals. Twenty people watch the seals. How many people watch the lions?
   _____ people

5. Juan collects 14 more leaves than Mia for science class. Mia collects 12 more leaves than Max. Max collects 9 leaves. How many leaves does Juan collect?
   _____ leaves
Solve. Work backward. Show your work.

1. Ann’s dog does 4 more tricks than Ben’s dog. Ben’s dog does 9 more tricks than Lisa’s dog. Lisa’s dog does 5 tricks. How many tricks does Ann’s dog do?

_______ tricks

2. Green Stable has 12 more horses than Happy Glen. Happy Glen has 9 more horses than Sun Farm. Sun Farm has 7 horses. How many horses does Green Stable have?

_______ horses

3. Dan has twenty fish in five different tanks. Ahmal has eight more fish than Dan. Their friend Andi has ten more fish than Ahmal. How many fish does Andi have?

_______ fish

4. In one week, Kitty Rescue saves 12 cats. That same week, Caring Paws saves 6 more cats than Kitty Rescue. Here Kitty Kitty saves 10 more cats than Caring Paws. How many cats did Here Kitty Kitty save?

_______ cats

5. Dora’s Diner has 3 more breakfast specials than the Tip-Top Grill. The Tip-Top Grill has 11 more breakfast specials than Charlie’s Cafe. Charlie’s Cafe has 6 breakfast specials. How many breakfast specials does Dora’s Diner have?

_______ specials
Add. Regroup when you have 10 ones.

**Step 1**

\[
\begin{array}{c}
18 \\
+ 6
\end{array}
\]

Add the ones.

___ ones = ___ ten ___ ones

Add. Regroup when you have 10 ones.

**Step 1**

1. \[
\begin{array}{c}
24 \\
+ 7
\end{array}
\]

Add the ones.

___ ones = ___ ten ___ one

2. \[
\begin{array}{c}
36 \\
+ 6
\end{array}
\]

Add the ones.

___ ones = ___ ten ___ ones
## Skills Practice

### Regroup Ones as Tens

Use WorkMat 6 and ________ to add.

<table>
<thead>
<tr>
<th></th>
<th>Add the ones.</th>
<th>Add the tens.</th>
<th>Do you regroup?</th>
<th>Write the sum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>15 + 7</td>
<td>1 tens 12 ones</td>
<td>yes no</td>
<td>15 + 7</td>
</tr>
<tr>
<td>2.</td>
<td>34 + 6</td>
<td>____ tens ____ ones</td>
<td>yes no</td>
<td>34 + 6</td>
</tr>
<tr>
<td>3.</td>
<td>52 + 7</td>
<td>____ tens ____ ones</td>
<td>yes no</td>
<td>52 + 7</td>
</tr>
<tr>
<td>4.</td>
<td>73 + 5</td>
<td>____ tens ____ ones</td>
<td>yes no</td>
<td>73 + 5</td>
</tr>
</tbody>
</table>

### Solve.

5. Sam has 93 stamps. Len gives him 4 more. How many stamps does Sam have now? _____ stamps

6. There are 17 students in the jump-rope club. 8 more join. How many students are in the club now? _____ students
Reteach

Add One-Digit Numbers and Two-Digit Numbers

Find the sum. Regroup if you need to.

Step 1

16
+ 6

Add the ones.

---

Step 2

| 1 6 16 |
| + 6 + 6 |
| ______ |

22

Add the tens.

---

Add. Shade 10 ones. Regroup if you need to.

Step 1

1. 35

+ 6

Add the ones.

---

Step 2

| 3 5 35 |
| + 6 + 6 |
| ______ |

Add the tens.

---

2. 24

+ 9

Add the ones.

---

| 2 4 24 |
| + 9 + 9 |
| ______ |

Add the tens.
Skills Practice
Add One-Digit Numbers and Two-Digit Numbers

Use WorkMat 6 and to add.

1. 
<table>
<thead>
<tr>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7</td>
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</table>
   +-----+-----+
   | 9    |      |

2. 
<table>
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   +-----+-----+
   | 4    |      |

3. 
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<td>5</td>
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</tbody>
</table>
   +-----+-----+
   |      | 7    |

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</table>
   +-----+-----+
   | 5    |      |

5. 
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<tbody>
<tr>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
   +-----+-----+
   |      | 8    |

6. 
<table>
<thead>
<tr>
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<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
   +-----+-----+
   | 5    |      |

Solve.

7. Jana scores 18 points in the first half of a game. She scores 6 more points in the second half. How many points does she score in all?
   ______ points

8. 22 parents come to watch the game. 9 friends also come. How many total people come to watch the game?
   ______ people
Name

Reteach

Add Two-Digit Numbers

Preparation: A set of counters is needed for this activity.

June has 28 stickers.
Pam gives her 16 more stickers.
How many stickers does June have now?

Step 1

28
+16

Step 2

Regroup 10 ones as 1 ten if you can.

28
+16

Step 3

June has
44 stickers.

Add. You can use counters to help. Regroup if you need to.

1. tens ones tens ones tens ones tens ones
   3 7 +2 7
   3 5 +1 5
   4 8 +2 5
   1 4 +2 3

2. tens ones tens ones tens ones tens ones
   1 9 +6 8
   3 6 +4 3
   5 4 +2 7
   3 8 +2 9

Chapter Resources

Grade 2  95  Chapter 5
Skills Practice
Add Two-Digit Numbers

Preparation: Base-ten blocks are needed for this activity.

Use WorkMat 6 and \( \underline{\text{Mat}} \) to add.

<table>
<thead>
<tr>
<th>1.</th>
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</thead>
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<tr>
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<td>ones</td>
<td>tens</td>
<td>ones</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>+ 1</td>
<td>7</td>
<td>+ 1</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.</th>
<th>2.</th>
<th>2.</th>
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<td>ones</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>+ 1</td>
<td>9</td>
<td>+ 4</td>
<td>4</td>
</tr>
</tbody>
</table>

Solve.

3. 46 people come to the museum in the morning. 39 more people come in the afternoon. How many people come to the museum?
   _____ people

4. 20 people go on a tour of the factory in the morning. 17 go on a tour in the afternoon. How many people go on a tour in all?
   _____ people
An estimate is an answer that is close to the exact answer. If you do not need an exact answer, you can estimate.

27 → 30 Think about which ten each addend is closer to.

+ 14 → + 10

27 is closer to 30. 14 is closer to 10.

27 + 14 is about 40.

41 is close to 40, so the answer is reasonable.

Round each addend to the nearest ten. Estimate the sum.

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
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<tbody>
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<td>14</td>
<td>50</td>
<td>10</td>
<td>59</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>82</td>
<td>12</td>
<td></td>
<td></td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>76</td>
<td>12</td>
<td></td>
<td></td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>31</td>
<td>28</td>
<td></td>
<td></td>
<td>59</td>
<td>66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>38</td>
<td>28</td>
<td></td>
<td></td>
<td>66</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>16</td>
<td>49</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>47</td>
<td>29</td>
<td></td>
<td></td>
<td>76</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>59</td>
<td></td>
<td></td>
<td>71</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>83</td>
<td>16</td>
<td></td>
<td></td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Estimate Sums

You can estimate when you don’t need an exact answer, or to check addition. A number line can help you estimate.

37 is closer to 40. 37 \rightarrow 40
28 is closer to 30. +28 \rightarrow +30
40 + 30 is 70. 37 + 28 = 65
65 is close to 70, so the answer is reasonable.

Add. Then round each addend to the nearest ten. Estimate the sum.

1. 28 \rightarrow 30
   + 28 \rightarrow +30
   \underline{56} \underline{60}
2. 38 \rightarrow
   + 49 \rightarrow +
3. 32 \rightarrow
   + 41 \rightarrow +

4. 48
   + 33
   +
5. 31
   + 32
   +
6. 22
   + 48
   +

Solve. Make an estimate.

7. Hugo has 43 cents. Olive has 48 cents. Together, do they have enough to buy a box of raisins that costs 85 cents? Prove your answer.

8. Kendra has 27 cents. Mikey has 43 cents. Do they have enough money to buy a box of popcorn that costs 90 cents? Explain.
Reteach
Add Three Two-Digit Numbers

You can use addition strategies to help you add three addends.

Look for doubles. Look for a ten.

\[
\begin{array}{c}
24 & + 32 \\
14 & + 33 \\
\hline
70 & + 61 \\
10 & + 11
\end{array}
\]

Add. Circle the doubles. Put a box on the tens.

1.  
\[
\begin{array}{ccccccc}
14 & 42 & 27 & 29 & 24 & 48 \\
24 & 27 & 10 & 42 & 11 & 11 \\
+ 13 & + 12 & + 13 & + 21 & + 26 & + 12 \\
\hline
51
\end{array}
\]

2.  
\[
\begin{array}{ccccccc}
17 & 23 & 45 & 6 & 10 & 23 \\
30 & 26 & 13 & 24 & 57 & 16 \\
+ 13 & + 46 & + 15 & + 40 & + 23 & + 33 \\
\end{array}
\]

3.  
\[
\begin{array}{ccccccc}
32 & 13 & 55 & 19 & 37 & 21 \\
18 & 36 & 20 & 41 & 17 & 17 \\
+ 11 & + 46 & + 15 & + 13 & + 32 & + 13 \\
\end{array}
\]
Skills Practice
Add Three Two-Digit Numbers

Look for two numbers in the ones column that make a ten or a double. Circle them. Add.

1. 23  41  35  13  26
   14  32  18  24  37
   + 27  + 12  + 25  + 4  + 14
   64

2. 8   36  55  11  35
   20  28  13  63  16
   + 12  + 32  + 14  + 24  + 34

3. 14  52  44  19  24
   18  20  16  68  3
   + 14  + 11  + 22  + 12  + 25

4. 21  37  14  62  43
   18  13  45  11  15
   + 21  + 22  + 3  + 23  + 22

Solve.

5. There are 34 children in first grade. There are 27 in second grade. There are 31 in third grade. How many children are there in all?  
   _____ children

6. 13 students play the bells.  
   16 students play the drums.  
   24 students play the recorder. How many total students play instruments?  
   _____ students
On a math test, Edie scores 10 points more than Jack. Jack’s score is 5 points more than Dee’s. Dee scores 73 points. How many points does Edie score?

**Step 1**

**What do I know?**

- Edie scores \( \underline{10} \) more points than Jack.
- Jack scores \( \underline{5} \) more points than Dee.
- Dee scores 73 points.

**What do I need to find?**

How many points \( \underline{\text{Edie}} \) scores.

**Step 2**

**How will I find how many?**

I can \underline{write} a number sentence.

**Step 3**

**Write a number sentence.**

- Jack scores \( \underline{5} \) more than Dee.
- Edie scores \( \underline{10} \) more points than Jack.
- Edie’s score is \( \underline{10} + \underline{5} + \underline{73} \).
- \( \underline{10} + \underline{5} + \underline{73} = \underline{88} \)
- Edie scored \( \underline{88} \) points.

**Step 4**

**Check**

Did I write a number sentence? \underline{yes}

Does my answer make sense? \underline{yes}
Reteach (2)  2MR1.1, 2AF1.2

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies
• Draw a Picture
• Work Backward
• Write a Number Sentence

Solve.

1. The school has three buses. 34 children ride on one bus. 27 children ride on the second bus. 33 children ride on the third bus. How many children ride in all?
   ______ children

2. Jesse’s bus takes 16 minutes to get to school. Miguel’s bus takes 17 more minutes to get to school. Jo’s bus takes 20 more minutes to get to school. How many minutes does it take Jo’s bus to get to school?
   ______ minutes

3. On what day did the art exhibit have the most visitors? Tell how you know.

   ______________________________________________________
   ______________________________________________________

4. Who visited the art exhibit more, adults or children? Tell how you know.

   ______________________________________________________
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies

• Draw a Picture
• Work Backward
• Write a Number Sentence

Solve.

1. Mr. Garcia’s class buys tickets for the basketball game. They buy 27 children’s tickets and 35 adult tickets. The team also gives them 30 free tickets. How many tickets does the class have in all?
   ______ tickets

2. At the game, 18 band members wear red, 22 band members wear blue, and 31 wear white. How many band members are there in all?
   ______ band members

3. At the snack stand, Tony sells 34 bags of popcorn. He sells 25 drinks and 32 hot dogs. How many snacks does he sell in all?
   ______ snacks

4. Cheryl scores 28 points. Jia scores 12 points more than Cheryl does. Brooke scores 18 more points than Jia. How many points does Brooke score?
   ______ points
Reteach

Subtract Tens

You can use basic facts to help subtract tens.  
5 \(-\) 2 = 3 helps you know that 50 \(-\) 20 = 30.

5 \(-\) 2 = 3

50 \(-\) 20 = 30

Solve.

1. 3 \(-\) 2 = ____

2. 30 \(-\) 20 = ____

3. 50 \(-\) 30 = ____

4. 40 \(-\) 10 = ____

5. 70 \(-\) 20 = ____

6. 60 \(-\) 30 = ____

7. 80 \(-\) 40 = ____

8. 90 \(-\) 10 = ____
Subtract tens.

1. 5 tens − 1 ten = ____ tens
    50 − 10 = ____

2. 8 tens − 5 tens = ____ tens
    80 − 50 = ____

3. 6 tens − 4 tens = ____ tens
    60 − 40 = ____

4. 9 tens − 3 tens = ____ tens
    90 − 30 = ____

5. 4 tens − 2 tens = ____ tens
    40 − 20 = ____

6. 7 tens − 2 tens = ____ tens
    70 − 20 = ____

Solve.

7. What is 2 tens from 7 tens? _____ − _____ = _____

8. What is 3 tens from 5 tens? _____ − _____ = _____
Reteach

Count Back Tens and Ones

4 − 3 = ?
Count back by ones to subtract.
3, 2, 1, . . . 4 − 3 = 1

40 − 30 = ?
Count back by tens to subtract ten.
30, 20, 10 . . . 40 − 30 = 10

Subtract. Use the models for exercises 1 and 2.
Write your answer.

Write the difference.

1. 46 − 4 = ______
2. 39 − 20 = ______
3. 77 − 40 = ______
4. 57 − 5 = ______
5. 53 − 20 = ______
6. 48 − 7 = ______
7. 65 − 40 = ______
8. 71 − 30 = ______
9. 37 − 4 = ______
10. 52 − 10 = ______
## Skills Practice

### Count Back Tens and Ones

Count back to subtract.

<p>| | | | | | |</p>
<table>
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<td>36</td>
<td>52</td>
<td>45</td>
<td></td>
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<tr>
<td></td>
<td>- 5</td>
<td>- 30</td>
<td>- 4</td>
<td>- 10</td>
<td>- 2</td>
</tr>
<tr>
<td>2. 61</td>
<td>68</td>
<td>75</td>
<td>89</td>
<td>37</td>
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<td>- 3</td>
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<tr>
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<td>65</td>
<td>32</td>
<td>60</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 1</td>
<td>- 40</td>
<td>- 10</td>
<td>- 3</td>
<td>- 10</td>
</tr>
<tr>
<td>4. 70</td>
<td>45</td>
<td>72</td>
<td>55</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 30</td>
<td>- 20</td>
<td>- 2</td>
<td>- 4</td>
<td>- 60</td>
</tr>
</tbody>
</table>

### Solve.

5. Lauren has 50 pennies in her pocket. She spends 20 of them. How many pennies does she have left? ____ pennies

6. Alex has 67 pennies. He spends three pennies. How many pennies does he have left? ____ pennies

7. What is 3 tens from 9 tens? ____ - ____ = ____

8. What is 4 tens from 5 tens? ____ - ____ = ____
Name ____________________________

6-3

Reteach

Regroup Tens as Ones

Candy had 32 markers. She gives six to Ray. How many markers does she have left?

\[32 - 6 = ?\]

To help solve this problem, you can regroup one box of markers as ten markers.

Now there are enough markers. Subtract.

\[32 - 6 = \text{_____.} \] Candy has 26 markers left.

Write the number sentences. Use \[\___\___\___\] .
Regroup if needed. Then solve.

1. Jim had 52 posters. He sold 18 of them. How many posters does he have now?
   \[\___ - \___ = \___\]

2. Ellen had 34 crayons. She gives 5 to her friends. How many does she have left?
   \[\___ - \___ = \___\]

3. John had 41 pennies. He spent 15 of them. How many pennies does he have now?
   \[\___ - \___ = \___\]

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Chapter Resources

Grade 2 109

Chapter 6
### Use WorkMat 6 and _______ to subtract.

<table>
<thead>
<tr>
<th></th>
<th>Do you need more ones to subtract?</th>
<th>Write the difference.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 32 − 5</td>
<td>no yes</td>
<td>32 − 5 = ______</td>
</tr>
<tr>
<td>2. 27 − 8</td>
<td>no yes</td>
<td>27 − 8 = ______</td>
</tr>
<tr>
<td>3. 28 − 5</td>
<td>no yes</td>
<td>28 − 5 = ______</td>
</tr>
<tr>
<td>4. 55 − 7</td>
<td>no yes</td>
<td>55 − 7 = ______</td>
</tr>
<tr>
<td>5. 41 − 6</td>
<td>no yes</td>
<td>41 − 6 = ______</td>
</tr>
<tr>
<td>6. 36 − 9</td>
<td>no yes</td>
<td>36 − 9 = ______</td>
</tr>
</tbody>
</table>

### Solve.

7. Brian has 42 trading cards. He gives seven to a friend. How many trading cards does Brian have left?
   _____ trading cards

8. Sam has 33 cents. He spends 15 at the store. How much money does he have left?
   _____ cents
### Reteach (1)

*Problem-Solving Strategy: Write a Number Sentence*

There are eight bats in a tower. Three more join them. How many bats are now in the tower?

<table>
<thead>
<tr>
<th><strong>Step 1</strong></th>
<th><strong>What do I know?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand</td>
<td>There are eight bats. Three more join them.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Step 2</strong></th>
<th><strong>How will I find out how many bats there are in all?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>I know the number of bats in the tower. I know the number of bats that join them. A number sentence would tell me how many there are. I would subtract if some bats left the tower. But no bats left the tower. I will write a number sentence and _____.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Step 3</strong></th>
<th><strong>Write an addition sentence.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Solve</td>
<td>8 + 3 = 11 bats</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Step 4</strong></th>
<th><strong>Check</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Check</td>
<td>What were the two groups in my addition sentence? Did my answer tell how many bats there are in all?</td>
</tr>
</tbody>
</table>
Write a number sentence to solve.

1. Spot has 13 bones in his doghouse. He found four more in the yard. How many bones does Spot have?
   
   ___ ___ ___ bones

2. Lu sees 17 rabbits in a field. She sees six more in the woods. How many rabbits does she see in all?
   
   ___ ___ ___ rabbits

3. Twenty-one monkeys are in the tree. Five monkeys swing away. How many monkeys are left?
   
   ___ ___ ___ monkeys

4. Thirteen crows are in a cornfield. Six fly away. How many crows are left?
   
   ___ ___ ___ crows

5. Kay finds six shells. Then she finds nine more. How many shells did she find in all?
   
   ___ ___ ___ shells

6. Joey catches 18 fish. His family keeps four of them. How many fish did they let go?
   
   ___ ___ ___ fish
Skills Practice

Problem-Solving Strategy: Write a Number Sentence

Write a number sentence to solve.

1. Seven kids are in the sandbox. Six more are on the swings. How many kids are there in all?
   _______ _______ _______ kids

2. Erica colors 15 pictures. She gives 11 to her family. How many pictures are left?
   _______ _______ _______ pictures

3. Ben ran 11 miles. Jeff ran 5 miles. How many more miles did Ben run?
   _______ _______ _______ miles

4. Roland mows lawns. He made 22 dollars the first week. He made 7 dollars the next. How much money did he make?
   _______ _______ _______ dollars

5. Nine chickens are eating. Fourteen more chickens join them. How many chickens are eating now?
   _______ _______ _______ chickens

6. Jesse buys 16 game cards. He gives 4 to his friends. How many cards does Jesse have left?
   _______ _______ _______ cards
Reteach
Subtract One-Digit Numbers from Two-Digit Numbers

Find 42 – 8.

<table>
<thead>
<tr>
<th>tens</th>
<th>ones</th>
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</tbody>
</table>

Show 42.
Can you subtract 8 ones?
Regroup 1 ten as 10 ones.
Now there are 3 tens and 12 ones.

Use WorkMat 6 and to subtract.

1. tens ones
   
   5 3
   – 9

2. tens ones
   
   3 4
   – 6

3. tens ones
   
   4 7
   – 8

4. 25 – 7

5. 81 – 8

6. 54 – 9

7. 62 – 3

8. 76 – 4

9. 33 – 6
Skills Practice

Subtract One-Digit Numbers from Two-Digit Numbers

Use WorkMat 6 and \( \underline{\text{WorkMat 6}} \) to subtract.

1. \[
\begin{array}{c|c}
\text{tens} & \text{ones} \\
1 & 13 \\
2 & 3 \\
\hline
- & 9 \\
\hline
1 & 4 \\
\end{array}
\]

2. \[
\begin{array}{c|c}
\text{tens} & \text{ones} \\
4 & 6 \\
\hline
- & 7 \\
\hline
\end{array}
\]

3. Gary has 72 cents. He spends eight cents. How much does he have now?
   _____ cents

4. There are 55 mice in the barn. A cat chases nine of them away. How many mice are left?
   _____ mice
Reteach

Subtract Two-Digit Numbers

Find 36 − 17.

Show 36.
Can you subtract 7 ones?
Regroup 1 ten as 10 ones.
Now there are 2 tens and 16 ones.

Use WorkMat 6 and _________ to subtract.

1. 

2. 

3. 

4. 29 − 15 

5. 41 − 18 

6. 63 − 38 

7. 76 − 49 

8. 54 − 25 

9. 32 − 16
Skills Practice

Subtract Two-Digit Numbers

Use WorkMat 6 and ___ to subtract.

1. 

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<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

2. 

<p>| | | | | | |</p>
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<tbody>
<tr>
<td></td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>4</td>
<td>5</td>
<td>-</td>
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<td>7</td>
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<tr>
<td>3</td>
<td>6</td>
<td>-</td>
<td>2</td>
<td>7</td>
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<tr>
<td></td>
<td>7</td>
<td>-</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

3. Phoebe makes 52 cookies for the bake sale. She sells 36 of them. How many cookies are leftover?
   ____ cookies

4. There are 41 pumpkins in the field. The farmer sold 17 of them. How many pumpkins are left?
   ____ pumpkins
Find 32 – 14.

<table>
<thead>
<tr>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>– 1</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Is this answer correct? Check by adding.

18 + 14 = 32

Subtract. Then check by adding.

1. 16
   - 5
   ___
   11
   + 5
   ___
   16

2. 53
   - 18
   ___
   35
   + 18
   ___
   53

3. 93
   - 38
   ___
   55
   + 38
   ___
   93

4. 46
   - 23
   ___
   23
   + 23
   ___
   46

5. 84
   - 57
   ___
   27
   + 57
   ___
   84

6. 75
   - 49
   ___
   26
   + 49
   ___
   75
Skills Practice

Check Subtraction

Subtract. Then check by adding.

1. \[\begin{array}{ccc} 65 & \text{44} & 37 \\ \hline \text{21} & \text{21} & \text{14} \\ \hline \text{44} & \text{65} & \text{25} \\ \hline \end{array} \]

2. \[\begin{array}{ccc} 71 & \text{54} & 81 \\ \hline \text{7} & \text{36} & \text{34} \\ \hline \end{array} \]

3. \[\begin{array}{ccc} 95 & \text{63} & 48 \\ \hline \text{23} & \text{9} & \text{19} \\ \hline \end{array} \]

Solve. Check by adding.

4. Students in Mr. Frank’s class made 10 pictures. They showed 6 at the art fair. How many were not shown?
   ____ pictures

5. Mr. Levine is 53 years old. Mr. Smith is 37 years old. How much older is Mr. Levine?
   ____ years older
Mildred Mouse counted 18 holes in one piece of cheese. She counted 31 holes in the other piece of cheese. How many holes are there in all?

**Step 1** Understand

**What do I know?**
There are 18 holes in one piece of cheese. There are 31 holes in the other piece of cheese.

**What do I need to find out?**
How many holes are there?

**Step 2** Plan

**How will I find out?**
I can draw a picture to find out how many holes there are. But that would take a long time.

I can write a number sentence. But it might be easier to use a model.

I can use a model.

**Step 3** Solve

**Use a model.**
There are _____ holes.

**Step 4** Check

Does my model show how many holes there are? Can I use my model to check my work?
Choose a strategy and solve.

1. 55 girls and 36 boys play volleyball. How many more girls than boys play volleyball?
   _____ more girls

2. There are 48 cows in the field. There are 23 in the barn. How many cows are there?
   _____ cows

Use the chart for Exercises 3 and 4.

<table>
<thead>
<tr>
<th>Swimmer</th>
<th>Number of Laps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan</td>
<td>22</td>
</tr>
<tr>
<td>Sandy</td>
<td>18</td>
</tr>
<tr>
<td>Alan</td>
<td>45</td>
</tr>
</tbody>
</table>

3. During swimming practice, how many laps did Dan and Sandy swim?
   _____ laps

4. How many more laps did Alan swim than Sandy?
   _____ more laps
Choose a strategy and solve.

1. There are 18 frogs in the pond.
   There are five frogs in the grass.
   How many frogs are there?
   ____ frogs

2. Together, Jamie and Alex picked 72 berries.
   Jamie picked 32. How many did Alex pick?
   ____ berries

3. There are 10 boys and 17 girls at the mall.
   How many kids are there?
   ____ kids

4. Ian has five sets of 10 crayons.
   He gives three crayons from each set to his brother.
   How many crayons does Ian have left?
   ____ crayons
In the problem below, you need to know about how many peanuts are left. You need to make a good guess. A guess is also called an estimate. You can estimate when you do not need an exact answer.

There are 18 peanuts in the pile. Edna the elephant eats 9 of them. About how many peanuts are left?

Step 1: Round each number to the nearest ten.

The number 9 is close to 10. The number 18 is close to 20.
9 rounds to 10.
18 rounds to 20.

Step 2: Subtract the rounded numbers to find your estimate.
18 – 9 is about the same as 20 – 10.
20 – 10 = 10
18 – 9 is about _____.

Round these numbers to the nearest ten and estimate the difference.

1. 47 → 50
   – 31 → – 30

2. 42 →
   – 33 → –

3. 39 →
   – 32 → –

4. 47 →
   – 38 → –
Skills Practice

Estimate Differences

Round each number to the nearest ten. Estimate the difference.

Round up if the number has 5, 6, 7, 8, or 9 ones. 
15 rounds up to 20.
Round down if the number has 4, 3, 2, or 1 ones. 
14 rounds down to 10.

1. \(49 - 31\) \hspace{1cm} 50 \\
\hspace{1cm} \underline{- 30} \\
\hspace{1cm} 20

2. \(66 - 27\) \hspace{1cm} \underline{-} \hspace{1cm} \underline{-}

3. \(77 - 31\) \hspace{1cm} \underline{-} \hspace{1cm} \underline{-}

4. \(39 - 31\) \hspace{1cm} \underline{-} \hspace{1cm} \underline{-}

5. \(48 - 32\) \hspace{1cm} \underline{-} \hspace{1cm} \underline{-}

6. \(89 - 11\) \hspace{1cm} \underline{-} \hspace{1cm} \underline{-}

Solve.

7. Sharon spent 33 cents at the carnival. Her brother spent 19 cents. About how much more did Sharon spend? _____ cents

8. Morgan has 32 music CDs. He gives 13 to his brother. About how many music CDs does Morgan have left? _____ CDs
You can skip count to find the value of pennies, nickels, and dimes.

penny 1¢  nickel 5¢  dime 10¢

Circle the coins you need to buy the object.

1.  2.  3.  4.  5.
Skills Practice
Pennies, Nickels, and Dimes

Count to find the value.

1. 
   
   
   
   
   
   
   
   
   
   
   Total ____ ¢

2. 

   
   
   
   
   
   
   
   
   
   Total ____ ¢

3. 

   
   
   
   
   
   
   
   
   
   Total ____ ¢

4. 

   
   
   
   
   
   
   
   
   
   Total ____ ¢

Solve.

5. Jake has six dimes in his pocket.
   How much money does Jake have? _____ ¢

6. Marcia has four dimes. Tia has six nickels.
   Who has more money? __________

7. Sue has 5 nickels. Jill has 5 dimes.
   Who has more money? __________
Reteach

Quarters and Half-Dollars

You can skip count to find the value of quarters and half-dollars.

quarter 25¢
Count by twenty-fives.

defective image

half-dollar 50¢
Count by fifties.

Circle the coins you need to buy the object.

1. 

2. 

3. 

4.
Skills Practice

Quarters and Half-Dollars

Count the value of the coins. Use coins to help. Then write the total in the price tag.

1. 

2. 

3. 

4. 

Solve.

5. Peg has three quarters in her pocket. How much money does she have? ______¢

6. Bobby has three quarters. Cindy has one half-dollar. Who has more money? ___________
Reteach
Count Coins

Find the value of the coins. Count to find the total amount.

27¢  35¢  50¢  72¢  Total

Count coins to check that there is enough money to buy the object. Circle yes or no.

1. 27¢  35¢  50¢  72¢  Total
   yes  no

2. 35¢  50¢  72¢  50¢  Total
   yes  no

3. 50¢  72¢  50¢  72¢  Total
   yes  no

4. 72¢  50¢  72¢  50¢  Total
   yes  no
Skills Practice

Count Coins

Count to find the total amount.

1.  

   1¢  1¢  1¢  1¢  1¢  

   total _____¢

2.  

   1¢  1¢  1¢  1¢  1¢  

   total _____¢

3.  

   1¢  1¢  1¢  1¢  1¢  1¢  

   total _____¢

4.  

   1¢  1¢  1¢  1¢  1¢  1¢  1¢  1¢  1¢  

   total _____¢

Solve.

5. Chuck has two quarters and three nickels in his pocket.  
   How much money does he have? _____¢

6. Carrie has two quarters, a dime, and a penny.  
   How much money does she have? _____¢
Name ____________________________

7-4

Reteach (1)

Problem-Solving Strategy: Act It Out

Preparation: Play money is needed for this activity.
Tara has four turtles.
Each turtle costs 10 cents.
How much did Tara spend on turtles?

Step 1

What do I know?

Tara has four turtles.
Turtles cost 10 cents each.

What do I need to find out?

How much do four turtles cost?

Step 2

How will I find out?

I can act it out to find out how much four turtles cost.

Step 3

Act it out.

Put a dime on each turtle. Then skip count the dimes.

4 dimes

_____ dimes = _____ cents

Step 4

Look back.

Does my answer make sense?

_____

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Reteach (2)  \[ 2NS5.0, 2AF1.2 \]

**Problem-Solving Strategy: Act It Out**

**Preparation:** Play money is needed for this activity.

**Use coins to act out and solve the problem.**

1. Leon has five hermit crabs. Each costs 5 cents. How much money did Leon spend on hermit crabs?
   
   ______ cents

2. Pat has 13 cents. Her dad gives her 9 cents. How much money does she have in all?
   
   ______ cents

3. Alisa makes 7 clay pots. She sells them for 12 cents each. How much money does Alisa make?
   
   ______ cents

4. Art wins 13 games of checkers. He makes 7 cents for charity each time he wins. How much does Art make?
   
   ______ cents

5. Ellis has 2 dimes, a quarter, and a penny. He wants to buy a fishing rod for 50 cents. Can he buy it?
   
   ______

6. Ling has 3 quarters, 1 dime, and 4 pennies. What is the most Ling can spend on a snack?
   
   ______ cents
Name ________________________________

7-4

Skills Practice

Problem-Solving Strategy: Act It Out

Preparation: Play money is needed for this activity.

Use coins to act out and solve the problems.

1. Andrea has 52 cents. Her brother gives her a quarter more. How much money does Andrea have?
   _____ cents

2. Reese has 50 cents. Gary gives her 2 nickels. How much money does Reese have now?
   _____ cents

   _____ cents

4. Greg has a half dollar in his pocket. His sister gives him a quarter and a penny. How much money does Greg have now?
   _____ cents

5. Miko has 7 pennies, 3 nickels, 1 dime, and 1 quarter. Does she have enough to buy a pen for 50 cents?
   _____

6. Nick has 85 cents. He buys a juice box for 2 dimes. How much does he have now?
   _____ cents
You can use different coins to make one dollar.

<table>
<thead>
<tr>
<th>Coin Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 pennies</td>
<td>$1.00</td>
</tr>
<tr>
<td>20 nickels</td>
<td>$1.00</td>
</tr>
<tr>
<td>10 dimes</td>
<td>$1.00</td>
</tr>
<tr>
<td>4 quarters</td>
<td>$1.00</td>
</tr>
<tr>
<td>2 half-dollars</td>
<td>$1.00</td>
</tr>
<tr>
<td>1 dollar bill</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

A dollar is equal to 100¢.  

\[ \$1.00 = 100\acute{c} \]

Circle the coins in each row that equal $1.00.

1. [Image of coins]

2. [Image of coins]

3. [Image of coins]

4. [Image of coins]
Skills Practice

Dollar

Count the coins. Write the value. Circle the coins that make one dollar.

1. 

2. 

3. 

4. 

Solve.

5. It costs one dollar to ride the merry-go-round. Anna has two quarters, two dimes, five nickels, and five pennies. Does she have enough money? _____

6. Leon has three quarters, one dime, one nickel, and two pennies. A loaf of bread costs one dollar. Does Leon have enough to buy a loaf? _____

7. Sylva has four quarters, a penny, and a nickel. If she buys a puzzle for one dollar, how much will Sylva have left? _____¢
Name __________________________

7-6
Reteach

Dollars and Cents

You can use decimals and dollar signs to show dollars and cents.

$1.00, $1.25, $1.50, $1.60, $1.70, $1.75, $1.76

Total $1.76 = 176¢

dollars → cents

Circle the bills and coins to match the amount in the bank.

1. $2.30

2. $3.15

3. $2.36
Skills Practice

Dollars and Cents

Count the money. Write the amount in dollars and cents.

1. $____._____
dollars cents

2. $____._____
dollars cents

3. $____._____
dollars cents

4. $____._____
dollars cents

Solve.

5. Tyler has two dollar bills, a half-dollar, three quarters, and two nickels. How much money can he spend?
   $____._____

6. Marie has three dollar bills, four quarters, eight dimes, and four pennies. How much money can she spend?
   $____._____

2NS4.0, 2NS5.2
Reteach

Compare Money Amounts

Count the money you have and compare it to the price.

Yogurt costs $1.25. Is there enough money to buy yogurt?

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</tr>
</thead>
<tbody>
<tr>
<td>$1.00</td>
<td>$1.10</td>
<td>$1.20</td>
<td>$1.25</td>
<td>$1.26</td>
</tr>
</tbody>
</table>

$1.26 is more than $1.25, so you have enough money.

Count the money. Circle the one that is more—the money or the price tag.

1. [Image with money and price tag]

2. [Image with money and price tag]

3. [Image with money and price tag]

4. [Image with money and price tag]
Skills Practice
Compare Money Amounts

Count. Is there enough money to buy each item? Circle yes or no.

1. $1.38  yes  no

2. $3.27  yes  no

3. $2.72  yes  no

4. $4.92  yes  no

Solve. Use coins and dollar bills to help.

5. Nari wants to buy a book. It costs $4.45. She has four dollar bills, a quarter, a dime, and a nickel. Does she have enough money? _____
Adding money is like adding numbers.

\[
\begin{array}{ccc|cc}
35\,\text{¢} & 35 & \$0.20 & 20 \\
+ 45\,\text{¢} & + 45 & + 0.42 & + 42 \\
\hline
80\,\text{¢} & 80 & \$0.62 & 62
\end{array}
\]

Remember to write ¢ or $ and a decimal point in your answer.

Add the money. Circle the answer.

1. \[87\,\text{¢} \quad 77\,\text{¢}\]

2. \[\$0.70 \quad \$0.80\]

3. \[\$0.75 \quad \$0.65\]

4. \[38\,\text{¢} \quad 83\,\text{¢}\]
Name ________________________________

7-8

Skills Practice

Add Money

Add.

1. 32¢ + 34¢
2. 14¢ + 62¢
3. 22¢ + 49¢

4. $0.12 + 0.37
5. $0.33 + 0.49
6. $0.32 + 0.65

Solve.

7. Leroy bought a movie ticket for $0.75. He also bought a magazine for $0.15. Add to find out how much money he spent. Draw the coins for each amount.

<table>
<thead>
<tr>
<th>Price of a Movie Ticket</th>
<th>Price of a Magazine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.75</td>
<td>$0.15</td>
<td>$ . 90</td>
</tr>
</tbody>
</table>

8. Lee has $0.61 in her pocket. Her dad gives her $0.07. How much money does she have now? _______

9. Mr. Adler found 73¢. He had 9¢ in his pocket already. How much money does he have? _______
Subtracting money is like subtracting numbers.

<table>
<thead>
<tr>
<th>45¢</th>
<th>45</th>
<th>$0.42</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 35¢</td>
<td>- 35</td>
<td>- $0.20</td>
<td>- 20</td>
</tr>
<tr>
<td>10¢</td>
<td>10</td>
<td>$0.22</td>
<td>22</td>
</tr>
</tbody>
</table>

Remember to write ¢ or $ and a decimal point in your answer.

Subtract the money. Circle the answer.

1. 24¢ – 14¢ = 8¢
2. 66¢ – 28¢ = 38¢
3. 74¢ – 32¢ = 42¢
4. 91¢ – 11¢ = 80¢
5. 89¢ – 41¢ = 48¢
6. $0.49 – $0.22 = $0.27
7. $0.77 – $0.69 = $0.08
8. $0.96 – $0.77 = $0.19
9. $0.51 – $0.07 = $0.44
10. $0.83 – $0.17 = $0.66
Skills Practice

Subtract Money

Subtract.

1. 63¢ 2. 64¢ 3. 94¢
   - 41¢   - 12¢   - 37¢

4. $0.87 5. $0.77 6. $0.28
   - $0.32   - $0.41   - $0.26

Solve.

7. Luke had $0.75. He spent $0.32. Subtract to find out how much money he has now. Draw the coins. _______

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.75</td>
<td>$0.32</td>
<td>$</td>
</tr>
</tbody>
</table>

8. Logan had $0.79 in his pocket. He spent $0.17. How much money does he have left? _______

9. Mrs. Paul gave 65¢ to her son. He spent 32¢. How much money does he have left? _______
Joe’s dad bought 20 bananas.
They ate six the first day.
How many bananas do they have left?

**What do I know?**
Joe’s dad bought 20 bananas.
They ate six bananas.

**What do I need to find out?**
How many bananas do they have left?

**How will I find out?**
I can draw a picture to find out how many bananas they have left. But subtracting would be faster.

I can subtract to find out how many bananas they have left.

**Write a number sentence.**
20 \( \boxed{6} \) = _____ bananas
Joe has _____ bananas left.

**Look back.**
Why did I need to subtract instead of add?
Did I choose the right strategy?
Reteach (2)

Problem-Solving Investigation: Choose a Strategy

Choose a strategy and solve.

1. Taylor has 14 kittens. Rhonda has 10 kittens.
   How many kittens do they have?
   \[ 14 \bigcirc 10 = \underline{\hspace{1cm}} \text{ kittens} \]
   They have \underline{\hspace{1cm}} kittens.

2. Lauren has 24 carrots. Her pet rabbit eats 13.
   How many carrots does she have now?
   \[ 24 \bigcirc 13 = \underline{\hspace{1cm}} \text{ carrots} \]
   Lauren has \underline{\hspace{1cm}} carrots left.

3. Gloria has $0.64. Vic has $0.31. About how much do they have?
   They have about $\underline{\hspace{1cm}}$

4. Mike has $0.41. Kyle has $0.59. How much money do they have?
   They have $\underline{\hspace{1cm}}$

5. Karen has 50 comic books. She gives 35 to Dale.
   How many comic books does she have left?
   She has \underline{\hspace{1cm}} comic books left.

6. Maria has four markers. Kyle has 12 markers.
   How many more markers does Kyle have?
   Kyle has \underline{\hspace{1cm}} more markers than Maria.
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Choose a strategy and solve.

<table>
<thead>
<tr>
<th>Problem-Solving Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Act It Out</td>
</tr>
<tr>
<td>• Choose an Operation</td>
</tr>
<tr>
<td>• Guess and Check</td>
</tr>
<tr>
<td>• Draw a Picture</td>
</tr>
</tbody>
</table>

1. Mr. Gary gave his son a quarter. He gave 50¢ to his daughter. How much money did he give his children? _____

2. Amy has two dollars, a quarter, and four nickels. Tony has three dollars, a half-dollar, a dime, and eight pennies. How much do they have altogether? Is your answer reasonable? _____ _____

3. There are 13 dimes on the table. Five more dimes are in the jar. How many dimes are there in all? _______________

4. Jen gets $1.50 a week for allowance. If she saves her money for four weeks, how much money would she have? ______

5. Ted has a dollar and two quarters in his pocket. His friend gives him a half-dollar and a nickel. His teacher gives him two cents. How much money does Ted have now? ______

6. Alex bought an apple for $0.33 and a banana for $0.47. Estimate how much money Alex spent. about ______
Preparation: Counters are needed for this activity.

Use ○ to keep track of equal groups.

Place a ○ on each equal group. Then count to see how many equal groups.

1. ______ equal groups

Use ○ to see how many equal groups.

2. ______ equal groups

3. ______ equal groups

4. ______ equal groups
Skills Practice

Equal Groups

Preparation: Counters are needed for this activity.

Skip count. Write how many in all.

1. ⭐⭐⭐⭐⭐⭐⭐⭐⭐
   ____     ____     ____     ____ in all

2. ⭐⭐⭐⭐⭐⭐⭐⭐⭐
   ____     ____     ____     ____ in all

3. [Images of groups of counters]
   ____     ____     ____     ____ in all

Use counters to solve.

4. Mollie uses counters to find how many equal
groups there are in problem 1. How many counters
will she use?
   _____ counters

5. Jamal has 3 groups of marbles. Each group has
4 marbles. Use counters to model Jamal’s groups.
Skip count to find how many there are in all.
   _____ marbles
Reteach
Repeated Addition

Preparation: Counters are needed for this activity.

Put a circle on each group. Count the circles. Count how many cubes are under each counter.

1. 3 counters

Add 2 for every counter. Write the numbers and the sum.

\[
\begin{align*}
2 + 2 + 2 &= \underline{6} \text{ cubes} \\
3 \text{ groups of } 2 &= \underline{6} \text{ cubes} \\
3 \times 2 &= \underline{6} \text{ cubes}
\end{align*}
\]

2. 

3 groups of ___ = ___ cubes

3. 

___ groups of ___ = ___ cubes
Add. Then multiply.

1. \[ 2 + 2 + \_ + \_ + \_ = \_] \]
   \[ \_ \times \_ = \_ \]

2. \[ \_ + \_ + \_ = \_ \]
   \[ \_ \times \_ = \_ \]

3. \[ \_ + \_ = \_ \]
   \[ \_ \times \_ = \_ \]

Solve.

4. Marco has 4 fish tanks. Each tank has 2 fish. Use repeated addition to show how many fish Marco has.
   \[ \_ + \_ + \_ + \_ = \_ \text{ fish in all} \]

5. Marco wants to find a faster way to show how many fish he has. Write a multiplication sentence to show him.
   \[ \_ \times \_ = \_ \text{ fish in all} \]
Reteach

Arrays

Color each row a different color. Count how many rows. Count how many in each row.

row 1

row 2

row 3

[Grid of circles]

_____ × _____ = _____
rows  in each row  in all

Color to count. Write a multiplication sentence for your count.

1. [Grid of circles]

_____ × _____ = _____
rows  in each row  in all

_____ × _____ = _____

2. [Grid of circles]

_____ × _____ = _____
rows  in each row  in all

_____ × _____ = _____

3. [Grid of circles]

_____ × _____ = _____
rows  in each row  in all

_____ × _____ = _____

4. [Grid of circles]

_____ × _____ = _____
rows  in each row  in all

_____ × _____ = _____
Skills Practice
Arrays

Color the array. Find the product.

1. \[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\] \[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\] \[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\]
\[
\frac{3}{\text{rows}} \times \frac{4}{\text{in each row}} = \frac{12}{\text{in all}}
\]

2. \[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\]
\[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\]
\[
\begin{array}{cccc}
\& \& \\
\& \& \\
\& \& \\
\& \& \\
\end{array}
\]
\[
\frac{3}{\text{rows}} \times \frac{4}{\text{in each row}} = \frac{12}{\text{in all}}
\]

Multiply.

3. \[4 \times 3 = \boxed{12}\]
4. \[6 \times 2 = \boxed{12}\]
5. \[4 \times 5 = \boxed{20}\]
6. \[3 \times 3 = \boxed{9}\]
7. \[5 \times 3 = \boxed{15}\]
8. \[6 \times 3 = \boxed{18}\]

Solve. Draw a picture if you need help.

9. Tomás has a carton of eggs. There are 2 rows in the carton. Each row has 6 eggs. How many eggs does Tomás have?
   \[
   \boxed{2} \times \boxed{6} = \boxed{12} \text{ eggs in all}
   \]

10. Elsa is baking muffins. Her muffin tin has 4 rows. She can bake 3 muffins in each row. How many muffins can Elsa bake in all?
    \[
    \boxed{4} \times \boxed{3} = \boxed{12} \text{ muffins in all}
    \]
Preparation: A set of counters is needed for this activity.

Using a doubles fact is the same as multiplying by 2. You can use counters to help.

Put a counter on each addend. Write the number of counters in the circle. Multiply.

\[ \text{3} \quad + \quad \text{3} \quad = \quad \text{\ } \times \text{3} \quad = \quad \text{____} \]

Put a counter on each addend. Write the number of counters. Multiply.

1. \[ 2 + 2 = \text{\ } \times \text{2} = \]
2. \[ 4 + 4 = \text{\ } \times \text{4} = \]
3. \[ 5 + 5 = \text{\ } \times \text{5} = \]
4. \[ 6 + 6 = \text{\ } \times \text{6} = \]
5. \[ 7 + 7 = \text{\ } \times \text{7} = \]
6. \[ 8 + 8 = \text{\ } \times \text{8} = \]
Multiply.

1. $2 \times 4 = \underline{8}$
2. $5 \times 0 = \underline{0}$
3. $5 \times 2 = \underline{10}$
4. $1 \times 5 = \underline{5}$
5. $2 \times 6 = \underline{12}$
6. $5 \times 3 = \underline{15}$
7. $7 \times 2 = \underline{14}$
8. $4 \times 5 = \underline{20}$
9. $2 \times 8 = \underline{16}$
10. $5 \times 6 = \underline{30}$
11. $9 \times 2 = \underline{18}$
12. $7 \times 5 = \underline{35}$

Multiply to solve.

13. Sophie has 5 colors of yarn. She has 3 balls of each color. How many total balls of yarn does Sophie have?
   \[ \underline{5} \times \underline{3} = \underline{15} \text{ balls of yarn} \]

14. Miguel has 2 bags of buttons. Each bag has 8 buttons. How many buttons does Miguel have?
   \[ \underline{2} \times \underline{8} = \underline{16} \text{ buttons} \]

15. Sam collects baseball cards of 5 teams. He has 4 cards from each team. How many baseball cards does Sam have in all?
   \[ \underline{5} \times \underline{4} = \underline{20} \text{ baseball cards} \]
Sanders’ Orchard sells bags of apples. Each bag has 4 apples. Mary buys 16 apples in all. How many bags does she buy?

**Step 1**
**What do I know?**
Each bag has 4 apples. Mary buys a total of 16 apples.

**What do I need to find out?**
How many bags does Mary buy?

**Step 2**
**How will I find out?**
I will draw a picture of each of Mary’s apples. I will circle groups of 4.

**Step 3**
**Draw a picture.**

How many groups are there? \( \frac{16}{4} \) groups
So, Mary buys \( \frac{16}{4} \) bags of apples.

**Step 4**
**Look back.**
Does my answer make sense? \( \text{yes} \)
8-5

Reteach (2)  
2NS3.0, 2MR1.0

Problem-Solving Strategy: Draw a Picture

Draw a picture to solve. 

Show your work here.

1. A.J., Vic, and Maria share a sack of pears. There are 12 pears in the sack. How many pears does each friend get?
   _____ pears each

2. Jack’s dad gives Jack 18 blocks. The blocks come in sets of 6. How many sets does Jack’s dad give?
   _____ sets of blocks

3. Ida knits 15 hats. She puts the hats into 3 gift boxes. Each box has the same number of hats. How many hats are in each box?
   _____ hats.

4. Mateo and his brother share 14 books. Each brother puts the same number of books on his own shelf. How many books does each brother get?
   _____ books
Skills Practice

Problem-Solving Strategy: Draw a Picture

Draw a picture to solve. Show your work here.

1. Grandpa Nathan wants to ship 20 crates. Each truck can hold 4 crates. How many trucks does Grandpa Nathan need?
   _____ trucks

2. Leona is packing 24 plates. If she puts 4 plates in a box, how many boxes will Leona need?
   _____ boxes

3. Ivan bought 12 balloons. He gave the balloons to 4 of his cousins. How many balloons did each cousin get?
   _____ balloons

4. Ms. Kim gave 15 paint pots to her art class. She has 5 students. How many paint pots did each student get?
   _____ paint pots
Reteach
Multiply 10s

**Preparation:** Base-ten blocks are needed for this activity.

Use [base-ten blocks] to help multiply by 10.

Count the number of tens rods. Then, count by 10 to see how many single blocks.

1 2 3 4 There are 4 tens rods.

10 20 30 40 There are 40 single blocks.

\[ \frac{4}{4} \times 10 = 40 \]

rods blocks in rod blocks in all

**Use [base-ten blocks] to multiply.**

1. \( 2 \times 10 = \) _____

2. \( 5 \times 10 = \) _____

3. \( 6 \times 10 = \) _____

4. \( 3 \times 10 = \) _____
Multiply 10s

Multiply.

1. \(2 \times 10 = \) _____  
2. \(9 \times 10 = \) _____  
3. \(3 \times 10 = \) _____  

4. \(8 \times 10 = \) _____  
5. \(5 \times 10 = \) _____  
6. \(6 \times 10 = \) _____  

7. \(1 \times 10 = \) _____  
8. \(4 \times 10 = \) _____  
9. \(10 \times 7 = \) _____  

10. \(10 \times 4 = \) _____  
11. \(10 \times 2 = \) _____  
12. \(10 \times 10 = \) _____  

13. \(10 \times 8 = \) _____  
14. \(10 \times 3 = \) _____  
15. \(10 \times 5 = \) _____  

Multiply to solve.

16. Rae collects books by 4 different authors. So far, she has 10 books by each author. How many books does Rae have in her collection?  
______ \(\times \) _____ = _____ books

17. Julie and Johnny each have a camera. They each took 10 pictures. How many pictures did Julie and Johnny take in all?  
______ \(\times \) _____ = _____ pictures
You can draw a picture to help.

There are 12 bananas.
There are 4 bananas in a bunch.
How many bunches are there?

Draw dots to show the first number.

Cross out groups of the second number.
Count how many Xs to solve.

There are _____ bunches.

---

Solve. Draw a picture to help.

1. 20 people are on teams. There are 5 people on each team.
   How many teams can you have?
   _____ teams

2. 15 students share rides to school. There are 3 students in each car.
   How many cars do they take?
   _____ cars

3. Tim’s grandpa is here for 28 days. There are 7 days in each week.
   How many weeks is Tim’s grandpa here?
   _____ weeks
Skills Practice
Repeated Subtraction and Division

Preparation: A set of connecting cubes is needed for this activity.

Use cubes. Make equal groups.
Subtract. Then divide.

1. Subtract groups of 2.
   How many equal groups can you make?
   You get _____ groups of 2.
   _____ ÷ _____ = _____

2. Subtract groups of 5.
   How many equal groups can you make?
   You get _____ groups of 5.
   _____ ÷ _____ = _____

Use cubes to solve.

3. Sally has 16 blocks. She puts them into groups of 2. How many equal groups of 2 does Sally have?
   _____ ÷ _____ = _____

4. Tanya has 20 beads. She puts them into groups of 4. How many equal groups of 4 does Tanya have?
   _____ ÷ _____ = _____
Reteach

Find Equal Shares

Preparation: Crayons are needed for this activity.

Color to make equal groups.

Make each group a new color.

\[ \text{6} \quad \text{blue} \quad \text{red} \quad \text{yellow} \]

3 equal groups

\[ \frac{2}{\text{in each group}} \quad \frac{6}{\div 3} = \] __________

Color to make equal groups. Write how many in each group. Divide.

1. \( \text{10} \quad \) \( \frac{\text{5 equal groups}}{\text{in each group}} \)

\[ \frac{\text{in each group}}{\div \text{in each group}} = \] __________

2. \( \text{14} \quad \) \( \frac{\text{2 equal groups}}{\text{in each group}} \)

\[ \frac{\text{in each group}}{\div \text{in each group}} = \] __________

3. \( \text{8} \quad \) \( \frac{\text{4 equal groups}}{\text{in each group}} \)

\[ \frac{\text{in each group}}{\div \text{in each group}} = \] __________
Skills Practice

Find Equal Shares

Use counters to make equal shares. How many are in each group? Divide.

1. 6 counters
   2 equal groups
   _____ ÷ _____ = _____

2. 18 counters
   9 equal groups
   _____ ÷ _____ = _____

3. 20 counters
   4 equal groups
   _____ ÷ _____ = _____

4. 12 counters
   4 equal groups
   _____ ÷ _____ = _____

5. 15 counters
   5 equal groups
   _____ ÷ _____ = _____

6. 16 counters
   2 equal groups
   _____ ÷ _____ = _____

7. 18 counters
   6 equal groups
   _____ ÷ _____ = _____

8. 25 counters
   5 equal groups
   _____ ÷ _____ = _____

Solve.

9. Leslie has 24 peaches. She put equal groups of peaches into 3 bowls. How many peaches are in each bowl?
   \[24 ÷ 3 = _____\] peaches

10. Mr. Chan wrote 20 pages. He divided the pages into 4 equal chapters. How many pages are in each chapter?
    \[20 ÷ 4 = _____\] pages
Gabe has 3 shelves.
Each shelf has 7 books.
How many total books does Gabe have?

**Step 1**
What do I know?
There are 3 shelves.
There are 7 books on each shelf.

**What do I need to find out?**
How many books in all?

**Step 2**
How will I find out?
I can draw a picture. With a picture, I can actually see how many books.

**Step 3**
Draw a picture.

Gabe has 21 books.

**Step 4**
Look back.
Did I draw a picture showing 3 shelves with 7 books? **yes**
Does my answer show how many total books? **yes**
Choose a strategy. Solve.

Problem-Solving Investigation: Choose a Strategy

Choose a strategy. Solve.

Problem-Solving Strategies
Make a table
Use a model
Draw a picture

Show your work here.

1. Evan is sending boxes of old books to his pen pal. He can fit 5 books in a box. If Evan sends 3 boxes, how many books can he pack?
   _____ books

2. The Garcia family has 6 flashlights. Each flashlight needs 2 batteries. How many batteries do they need to buy?
   _____ batteries

3. The five Li sisters share 25 barrettes. They have an equal number of barrettes. How many barrettes does each sister have?
   _____ barrettes each
Choose a strategy. Solve.

**Problem-Solving Strategies**
- Make a table
- Use a model
- Draw a picture

1. Seven cousins share 14 friendship bracelets. They each have the same number of bracelets. How many bracelets does each cousin have? _____ bracelets each

2. Abby made 12 dollars babysitting. She babysat for 3 hours. How many dollars did Abby make each hour? _____ dollars each hour

3. Devon feeds his three rabbits 15 carrots. Each rabbit eats the same number of carrots. How many carrots does each rabbit eat? _____ carrots each
   What if Devon fed the rabbits 18 carrots? _____ carrots each

4. Liam made 6 pies. Each pie has 3 apples. How many apples did Liam use in all? _____ apples
   How many apples would Liam need for 8 pies? _____ apples
Reteach

Equal Groups with Remainders

Preparation: Crayons are needed for this activity.

Color to make equal groups. Color to find the remainder.

Make each group a new color.

The counter you do not color is the remainder.

\[ \text{blue} \quad \text{red} \quad \text{yellow} \]

remainder = 1

7 counters
3 equal groups of 2 counters \( 7 \div 3 = \underline{2} \) remainder \( \underline{1} \)
1 counter left over

Color to make equal groups. Divide. Write the remainder if there is one.

1. \[ \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \]

13 \( \div 3 = \underline{4} \) remainder \( \underline{1} \)

2. \[ \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \]

9 \( \div 2 = \underline{4} \) remainder \( \underline{1} \)

3. \[ \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \quad \text{○} \]

17 \( \div 3 = \underline{5} \) remainder \( \underline{2} \)
Skills Practice

Equal Groups with Remainders

Preparation: Connecting cubes are needed for this activity.

Use cubes to make equal groups. Divide.
Write the remainder if there is one.

1. 10 marbles are shared by 3 sisters.
   \[10 \div 3 = \text{____ remainder ____} \]
   Each sister has ____ marbles, and there is ____ left over.

2. 17 toys are shared by 3 dogs.
   \[17 \div 3 = \text{____ remainder ____} \]
   Each dog gets ____ toys, and there are ____ toys left over.

3. 20 glasses of lemonade are shared by 6 children.
   \[20 \div 6 = \text{____ remainder ____} \]
   Each child gets ____ glasses, and there are ____ glasses left over.

4. Jin, Cass, and Nelle found 16 strawberries. They shared the strawberries equally. Were there any left over? ____
   \[16 \div 3 = \text{____ remainder ____} \]

5. Jaime and June shared 12 crackers equally. Were there any left over? ____
   \[12 \div 2 = \text{____ remainder ____} \]
Fractions show equal parts of one whole.

2 equal parts 3 equal parts 4 equal parts 8 equal parts

1 of __ parts is shaded. 1 of __ parts is shaded. 1 of __ parts is shaded. 1 of __ parts is shaded.

Write the fraction for the shaded part.

1. 4 equal parts

1 of __ parts is shaded.

2. 8 equal parts

1 of __ parts is shaded.

3.

4.

5.
Prepare: Crayons are needed for this activity.

Write the fraction for the shaded part.

1. \[\frac{1}{2}\]

Color part of each figure to show the fraction.

2. \[\frac{1}{3}, \frac{1}{8}, \frac{1}{2}\]

Solve.

3. Lori has a glass of milk. She drinks half of it. How much milk is left?

\[\frac{1}{2}\]

4. Steven needs a piece of string. He cuts off \[\frac{3}{4}\] of the piece of string and uses it. How much string is left?

\[\frac{1}{4}\]
Reteach

Other Fractions

A fraction can name the number of equal parts that are shaded. Count the number of equal parts that are shaded.

4 equal parts

6 equal parts

____ of 4 equal parts are shaded.

____ of 6 equal parts are shaded.

__

4

__

6

Write the fraction for the shaded part.

1.

8 equal parts

____ of 8 parts are shaded.

__

8

2.

3 equal parts

____ of 3 parts are shaded.

__

3

3.

4.

5.
Skills Practice
Other Fractions

Preparation: Crayons are needed for this activity.

Write the fraction for the shaded part.

1.  
   \[ \frac{1}{4} \]

2.  
   \[ \frac{3}{4} \]

3.  
   \[ \frac{3}{8} \]

4.  
   \[ \frac{5}{8} \]

5.  
   \[ \frac{3}{4} \]

6.  
   \[ \frac{5}{8} \]

Color part of each figure to show the fraction.

7.  
   \[ \frac{5}{8} \]

8.  
   \[ \frac{3}{4} \]

9.  
   \[ \frac{3}{6} \]

10. Bill eats some pizza. Color three-fourths of the circle to see how much Bill eats. Write the correct fraction.

11. Mr. Li is putting tile in his hall. Color five-eighths of the rectangle to see how much he has done. Write the correct fraction.
Reteach (1)

Problem-Solving Strategy: Draw a Picture

Nina put frosting on 2 parts of a cake. The cake has six equal parts. What fraction of the cake has frosting?

Step 1
Understand

What do I know?
There is frosting on 2 parts of a cake. The cake has six equal parts.

What do I need to find out?
The fraction of the cake that has frosting.

Step 2
Plan

How will I find out?
I can draw a picture. A picture will help me see the fractions.

Step 3
Solve

Draw a picture.

__ of the cake has frosting.

Step 4
Check

Look back.
How did drawing a picture help me solve the problem?
Problem-Solving Strategy: Draw a Picture

Draw a picture to solve. Show your work.

1. Josie’s mom is making a sandwich. She cuts the sandwich into 4 equal pieces. Josie eats 2 pieces. Her mom eats 1 piece. What fraction shows how much of the sandwich they eat?

Josie and her mom eat ___ of the sandwich.

2. Tom is making a spinner for a game. He draws a circle with 6 equal parts. Then, he colors 1 part blue. What fraction of the spinner is not blue?

___ of Tom’s spinner is not blue.

3. Kim and her dad are making a pizza with 8 equal slices. They put mushrooms on the first 4 slices. Then, they put peppers on the last 4 slices. Kim does not like peppers. What fraction of the pizza can she eat?

Kim can eat ___ of the pizza.
Skills Practice

Problem-Solving Strategy: Draw a Picture

Draw a picture to solve. Show your work.

1. Ben is making a comic strip. First, he draws a rectangle with five equal parts. Then, Ben draws in 3 of the parts. What fraction of the comic strip did Ben draw so far?

Ben has drawn ___ of the comic strip.

2. Jose’s grandma is making a quilt. The quilt is a rectangle with 9 equal parts. 4 of the parts are green. What fraction of the quilt is green?

___ of the quilt is green.

3. Tina cuts a pie into 6 equal slices. She puts whipped cream on two of the slices. She leaves the other slices plain. What fraction shows how many slices are plain?

Tina leaves ___ of the slices plain.
Reteach

Fractions Equal to 1

You can write a fraction for the whole.

There are 4 shaded parts.
There are 4 equal parts.

The number of shaded parts is the **top** number of this fraction. \( \frac{4}{4} \) \( \rightarrow \) The total number of equal parts is the **bottom** number of a fraction.

The fraction \( \frac{4}{4} \) equals 1.

Count the parts in each whole.
Then write the fraction for the whole.

1. 

2. 

3. 

4. 

5. 

6.
Preparation: Crayons are needed for this activity.

Count and color all parts of each whole. Then write the fraction for the whole.

1. \[\frac{3}{3}\]

2. \[\frac{2}{2}\]

3. \[\frac{8}{8}\]

4. \[\frac{1}{1}\]

5. \[\frac{4}{4}\]

6. \[\frac{3}{3}\]

7. Dave has a pizza. It has been sliced into 8 equal pieces and none of it has been eaten. Color each piece. Next to it, write the fraction for the pizza.

8. Dave eats two slices of his pizza. What fraction of the pizza did he eat?
Compare the shaded parts. Which fraction is greater?

\[ \frac{1}{3} \]  \hspace{1cm} \frac{1}{2} 

Compare the shaded parts. Then circle the fraction that is greater.

1. \[ \frac{1}{4} \]  \hspace{1cm} \frac{1}{3}  \hspace{1cm} \frac{1}{2}  \hspace{1cm} \frac{1}{4}

Compare the fractions. Then write < or >.

2. \[ \frac{1}{3} \]  \hspace{1cm} \frac{1}{6}  \hspace{1cm} \frac{1}{8}  \hspace{1cm} \frac{1}{4}

3. \[ \frac{1}{6} \]  \hspace{1cm} \frac{1}{4}  \hspace{1cm} \frac{1}{3}  \hspace{1cm} \frac{1}{8}
Skills Practice

Compare Fractions

Compare the fractions. Then write < or >.

1. \( \frac{1}{3} \) \( \circ \) \( \frac{1}{4} \)

2. \( \frac{1}{12} \) \( \circ \) \( \frac{1}{6} \)

Compare the fractions. Use < or >.

3. \( \frac{1}{3} \) \( \circ \) \( \frac{1}{6} \)
4. \( \frac{1}{8} \) \( \circ \) \( \frac{1}{4} \)
5. \( \frac{1}{6} \) \( \circ \) \( \frac{1}{12} \)

6. \( \frac{1}{2} \) \( \circ \) \( \frac{1}{3} \)
7. \( \frac{1}{4} \) \( \circ \) \( \frac{1}{6} \)
8. \( \frac{1}{3} \) \( \circ \) \( \frac{1}{6} \)

Solve

9. Lu and Marta each have a cup of punch. Lu drinks \( \frac{1}{3} \) of her punch while Marta drinks \( \frac{1}{2} \) of hers. Which girl drinks more punch? Explain.

10. \( \frac{1}{12} \) of Lila’s scarf is green. \( \frac{1}{8} \) of Nick’s scarf is green. Whose scarf has more green? Prove your answer.
You can show a fraction of a group. 

How many squares are white? ____ ____ → white square
How many squares are there in all? ____ ____ → in all
_____ of the squares are white.

Count squares to find the fraction.

1. 

How many squares are white? ____ ____ → white square
How many squares are there in all? ____ ____ → in all
_____ of the squares are white.

2. 

How many squares are white? ____ ____ → white square
How many squares are there in all? ____ ____ → in all
_____ of the squares are white.

3. 

How many squares are white? ____ ____ → white square
How many squares are there in all? ____ ____ → in all
_____ of the squares are white.
Skills Practice
Unit Fractions of a Group

Write the fraction for the shaded part.

1. \[ \frac{1}{6} \]

2. \[ \frac{2}{5} \]

Look at the picture. Write the fraction.

3. What fraction of the animals are fish?
   - \[ \frac{\text{total number of fish}}{\text{total number of animals}} \]

4. What fraction of the animals are dolphins?
   - \[ \frac{\text{total number of dolphins}}{\text{total number of animals}} \]

Solve.

5. Molly has 1 black kitten and 5 white kittens. Use a fraction to write how many of the kittens are black. \[ \frac{1}{6} \]

6. The zoo has 7 dolphins and 1 seal. Use a fraction to write how many of the animals are seals. \[ \frac{1}{8} \]
A fraction can name part of a group.

Circle the equal parts.

There are _____ equal parts.

What fraction of the fish are striped? _____ of 3 equal parts are striped.

The striped part is_____.

Circle the equal parts. Then write the fraction for the striped part.

1. 

2. 

3. 

4. 

_____ 

_____ 

_____ 

_____
Skills Practice
Other Fractions of a Group

Preparation: Crayons are needed for this activity.

Color to show the fraction of the group.

1. \( \frac{5}{6} \) of the crayons are green.

2. \( \frac{3}{4} \) of the crayons are pink.

3. \( \frac{3}{3} \) of the crayons are blue.

4. \( \frac{3}{8} \) of the crayons are red.

5. \( \frac{1}{2} \) of the crayons are yellow.

6. \( \frac{1}{6} \) of the crayons are orange.

Solve.

7. Eric has three black dogs and one spotted dog. Write the fraction for the black dogs. _____
Lin and her mom are buying eight pies.
Five of the pies are banana and the rest are apple.
What part of the pies are apple? Show your answer as a fraction.

### Step 1
**Understand**

**What do I know?**
- Lin and her mom are buying 8 pies.
- Five pies are banana and the rest are apple.

**What do I need to find out?**
- What part of the whole is apple?

### Step 2
**Plan**

**How will I find out?**
- I can write a number sentence.
- If I subtract to find out how many pies are apple, I can find the part of the whole.

### Step 3
**Solve**

**Write a number sentence.**
- \(8\) pies in all \(-\) \(5\) banana \(=\) \(3\) apple
- \(3\) parts of the whole are apple.
- \(\frac{3}{8}\) of the pies are apple.

### Step 4
**Check**

**Look back.**
- Did I check my answer to make sure it made sense?
Choose a strategy to answer each question.

**Problem-Solving Strategies**
- Use a Pattern
- Write a Number Sentence
- Make a Table

1. Johnson’s pet shop has 4 cages. Each cage can hold 3 kittens. How many kittens are in Johnson’s pet shop?
   _____ kittens

2. There were 16 birds in the park. 12 of the birds were crows and the others were ducks. What fraction of the birds were ducks?
   _____
   Which is greater, the fraction of birds that are crows or ducks?
   Explain. ____________________________________________________________

3. There are 8 children on the beach. 3 are swimming and 5 are playing tag. What fraction of children are swimming? _____
   What fraction of children are playing tag? _____

4. Marie plants 12 flowers. Four flowers are tulips. The other flowers are daisies. What fraction shows how many flowers are daisies?
   _____
Choose a strategy to answer each question.

1. David has 12 fish. 4 of his fish are yellow and 4 are orange. How many fish are not yellow or orange? _____ fish

2. Alma cut a melon in halves. She shared one-half with her brother. Her grandparents shared the rest. How much of the melon did Alma eat? _____

3. Megan breaks a muffin into 3 equal pieces. She eats 2 pieces. What fraction of the muffin did she eat? _____

4. Juan buys 15 marbles to give to friends. He gives 5 marbles to Abby. He gives 6 marbles to Lou. He gives the rest to Jon. What fraction shows how many marbles Jon has? _____

5. Eve has 13 strawberries. She puts 9 in a tart. She eats the rest. How many strawberries does Eve eat? _____ strawberries

Problem-Solving Strategies
• Use a Pattern
• Write a Number Sentence
• Make a Table
**Reteach**

**Hundreds**

**Preparation:** Scissors and glue are needed for this activity.

**Cut the tens and hundreds below. Glue to show the number.**

1. 4 tens = 40 ones
2. 6 tens = 60 ones
3. 2 hundreds = 20 tens = 200 ones
4. 3 hundreds = 30 tens = 300 ones
Write how many.

1. 6 groups of ten
   _____ tens = _____ ones
   6 tens = 60 ones

2. 9 groups of ten
   _____ tens = _____ ones

   9 tens = _____ ones

3. 4 groups of one hundred
   _____ hundreds = _____ tens = _____ ones

4. 2 groups of one hundred
   _____ hundreds = _____ tens = _____ ones

5. 7 groups of one hundred
   _____ hundreds = _____ tens = _____ ones

6. 1 group of one hundred
   _____ hundred = _____ tens = _____ ones

7. 5 groups of one hundred
   _____ hundreds = _____ tens = _____ ones

8. 8 groups of one hundred
   _____ hundreds = _____ tens = _____ ones

Solve.

9. Elian has 3 groups of straws. Each group has 10 straws. How many straws does Elian have?
   _____ tens = _____ straws in all

10. Kris has 4 groups of 100 blocks. How many blocks does Kris have?
    _____ hundreds = _____ tens = _____ blocks in all
**Reteach**

*Hundreds, Tens, and Ones*

You can use pictures to represent hundreds, tens, and ones.

<table>
<thead>
<tr>
<th>Number</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Write and draw how many hundreds, tens, and ones.

1. 192
   - _____ hundred(s)
   - _____ tens
   - _____ ones

2. 267
   - _____ hundred(s)
   - _____ tens
   - _____ ones

Write the number.

3. 3 hundreds 2 tens 5 ones = ______
4. 2 hundreds 4 tens 9 ones = ______
5. 8 hundreds 7 tens 0 ones = ______
Skills Practice

Hundreds, Tens, and Ones

Write how many hundreds, tens, and ones.

1. 736
   ___ hundreds ___ tens ___ ones
   7 3 6

2. 263
   ___ hundreds ___ tens ___ ones

3. 518
   ___ hundreds ___ ten ___ ones

4. 185
   ___ hundred ___ tens ___ ones

5. 360
   ___ hundreds ___ tens ___ ones

Solve.

6. Percy has 372 blocks.
   How many tens does he have? _______ tens

7. Luis has 613 beads.
   How many hundreds does he have? _______ hundreds

8. Dana has 490 stickers.
   How many tens does she have? _______ tens
Each roller coaster car seats 3 children. Will, Mateo, and Li want to sit in the same car. How many different ways can they sit?

**Step 1**

**What do I know?**
- There are 3 children.
- Their names are Will, Mateo, and Li.
- They want to sit in the same car.

**What do I need to find out?**
- How many different ways can they sit?

**Step 2**

**How will I find out?**
- I will make a list of all ways to sit.
- A list is a clear way to show names or numbers.

**Step 3**

**Make a list.**
- Will, Mateo, Li
- Mateo, Will, Li
- Li, Will, Mateo
- Will, Li, Mateo
- Mateo, Li, Will
- Li, Mateo, Will

There are **6** ways to sit.

**Step 4**

**Look Back**
- How can I be sure that I found all ways to sit?
Make a list to solve. Show your work.

1. Three students are running a race. Each student is wearing a number: 4, 5, or 6. The students can finish first, middle, or last. Use the numbers to find out how many ways the race can end.

There are _____ ways for the race to end.

2. Olive is coloring 3 flowers in a row. She is using her blue, yellow, and red crayons. How many ways can she color the flowers?

There are _____ ways to color the flowers.

3. Abdul has tomato seeds and pepper seeds. He can put each in a clay pot or a plastic pot. How many different plant pots can he make?

Abdul can make _____ different plant pots.
Name ________________________________

10-3

Skills Practice

Problem-Solving Strategy: Make a List

Preparation: A separate piece of paper is needed for this activity.

Make a list to solve. Use a separate piece of paper.

1. Chen chooses where people sit at the picnic. He has 3 seats in a row for Mom, Lien, and Roy. How many different ways can they sit? Write them.

   ____________________________________________

   ____________________________________________

   ____________________________________________

   They can sit in _____ different ways.

2. Nina is making a birdhouse. Birdhouse kits come in 3 sizes: big, medium, and small. She can choose from white, blue, or pink paint. How many different birdhouses can Nina make?

   Nina can make _____ different birdhouses.

3. A kite tail has space for 3 bows. Rob has a green bow, a blue bow, and a gold bow. How many different ways can Rob tie the bows?

   Rob can tie the bows in _____ different ways.

4. Lupé lost her classroom number. She remembers that it has the numbers 2, 3, and 4. How many different three-digit numbers could she try?

   Write them. _____, _____, _____, _____, _____, _____, _____

   Lupé could try _____ rooms.
Name

10-4

Reteach

Place Value to 1,000

Expanded form shows how many thousands, hundreds, tens, and ones.
Match each number to the correct expanded form.

1. 345  \( 900 + 10 + 5 \)
2. 721  \( 200 + 70 + 8 \)
3. 166  \( 700 + 20 + 1 \)
4. 915  \( 800 + 30 + 7 \)
5. 584  \( 300 + 40 + 5 \)
6. 439  \( 600 + 90 + 0 \)
7. 278  \( 100 + 60 + 6 \)
8. 690  \( 1000 + 0 + 0 + 0 \)
9. 837  \( 500 + 80 + 4 \)
10. 1,000 \( 400 + 30 + 9 \)
Skills Practice
Place Value to 1,000

Write how many thousands, hundreds, tens, and ones. Then write the number.

1. 

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
</table>

_____ thousand _____ hundreds _____ tens _____ ones

_______ + ______ + ______ + ______ = ________

2. 

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
</table>

_____ thousand _____ hundreds _____ tens _____ ones

_______ + ______ + ______ = ________

Solve.

3. The theater sells 142 tickets. Show how many tickets were sold in expanded form.

_____ + _____ + _____ = 142 tickets

4. An airplane flies 640 miles. How many hundreds?

__________ hundreds
Reteach

Read and Write Numbers to 1,000

Preparation: Scissors and glue are needed for this activity.

Words can tell numbers.
Cut and glue words to match the numbers.

1. 496

2. 937

3. 1,000

4. 188

5. 350

6. 625

one hundred eighty-eight  one thousand
four hundred ninety-six  three hundred fifty
nine hundred thirty-seven  six hundred twenty-five
Read the number. Write it in 2 different ways.

1. 300 + 70 + 2

\[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
& & \\
\end{array}
\]

2. eight hundred forty-one

\[
\begin{array}{ccc}
\_ & + & \_ \\
\hline
\_ & + & \_ \\
\end{array}
\]

Circle the correct number word.

3. 975
   - nine hundred fifty-seven
   - nine hundred seventy-five

4. 193
   - one hundred ninety-three
   - one hundred ninety

Solve.

5. There are 429 students at Linden School. Cora wants to write the number in words for a newsletter. What should she write?

______________________________ students

6. Marco lives at nine hundred thirty-one Maple Street. Use expanded form to show Marco’s address.

\[
\begin{array}{ccc}
\_ & + & \_ \\
\hline
\_ & + & \_ \\
\_ & + & \_ \\
\end{array}
\]

Maple Street
Problem-Solving Investigation: Choose a Strategy

**Preparation:** Base-ten blocks are needed for this activity.

The bakers at Barry’s Bakery baked 238 bagels. Then, they baked 20 more bagels. Write the number name for the number of bagels baked in all.

---

**Step 1**

**What do I know?**

The bakers baked 238 bagels.

They baked 20 more.

**What do I need to find out?**

The number of bagels baked in all.

---

**Step 2**

**How will I find out?**

You can use a model to find the difference.

---

**Step 3**

**Use a model.**

```
<table>
<thead>
<tr>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The bakers baked</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

---

**Step 4**

**Look Back.**

Did I use a model to count the bagels?

Does my model show how many were added?
Reteach (2)  

Problem-Solving Investigation: Choose a Strategy

Preparation: Access to base-ten blocks is needed for this activity.

Solve.

Problem-Solving Strategies
Make an organized list
Write a number sentence
Use a model

1. Carmen has 659 blocks. How many groups of hundreds, tens, and ones are there?

2. Pat’s Fruit Stand has 534 peaches for sale. Pat sells 30 peaches this afternoon. How many peaches are left to sell?

3. Lucy is thinking of a number. Her number is greater than two hundred twenty-five. Her number is less than 2 hundreds 2 tens 7 ones. What is Lucy’s number?

What number is ten more than Lucy’s number?

What number is one hundred less than Lucy’s number?

4. Ralph has 957 star stickers. He gave 10 to Ken. Write the words that tell how many star stickers Ralph has left.

What if Ralph gave Ken 100 stickers instead? Write that number in words.
Solve.

**Problem-Solving Strategies**
- Make an organized list
- Write a number sentence
- Use a model

**Preparation:** Access to base-ten blocks is needed for this activity.

1. Naomi is playing a word game. She must write down how many ways to combine the letters N, O, and T. How many ways are there?

There are _____ ways for Naomi to combine N, O, and T.

2. Maria’s bean jar has less than 734 beans. The jar has greater than 732 beans. What is the number word for how many beans in Maria’s jar?

______________________
______________________ beans

3. Franklin writes the number word four hundred ninety-one. If he shows the number in cubes, how many tens will there be? _____

4. Jin’s family brings three hundred twenty-five tarts to the bake sale. They sell ten this morning. How many tarts are left to sell? _____
Pictures can show how some numbers are greater than others.

Look at each picture. Write the number that shows how many cubes. Then, circle the number that is greater.

1. 

2. 

3. 

4. 

5. 

Name ____________________________

211
Skills Practice

Compare Numbers

Compare. Write >, <, =.

1. 231 □ 162
2. 153 □ 153
3. 323 □ 321
4. 480 □ 484

5. 278 □ 287
6. 679 □ 677
7. 908 □ 908

Write greater than, less than, or equal to. Solve.

6. Ms. Smith has 541 books. Mr. Costa has 529 books.
   541 is _______________ 529.
   Who has the greater number of books? _____________

7. The third grade sold 239 raffle tickets. The second grade sold 401 raffle tickets.
   239 is _______________ 401.
   Which grade sold less raffle tickets? _______________
Place value can help order numbers from **greatest** to **least**.

823, 832, 932  First, compare hundreds.

932, __, __  932 is greater than 823 and 832.

932, 832, 823.  Then, compare tens. 832 is greater than 823.

Write the numbers from **greatest** to **least**. Use place value to order the numbers.

1. 602, 612, 206

   __________, __________, __________

2. 879, 897, 987

   __________, __________, __________

3. 301, 130, 103

   __________, __________, __________

4. 455, 545, 544

   __________, __________, __________

5. 728, 287, 872

   __________, __________, __________

6. 139, 109, 301, 391

   __________, __________, __________, __________

7. 217, 720, 721, 127

   __________, __________, __________, __________
Skills Practice
Order Numbers

Order the numbers from greatest to least.

1. 354, 674, 359
   674, ________, ________

2. 592, 952, 951
   ________, ________, ________

3. 808, 873, 782
   ________, ________, ________

Order the numbers from least to greatest.

4. 423, 444, 324
   ________, ________, ________

5. 192, 157, 132
   ________, ________, ________

6. 745, 867, 748
   ________, ________, ________

7. 168, 186, 166
   ________, ________, ________

Solve.

8. Sen’s 4 friends live on the same street. She wrote down their house numbers.
   234  423  324  403
   How can Sen write the house numbers from greatest to least?
   ________, ________, ________, ________

9. Now Sen wants to write the house numbers from least to greatest. What should the second house number be? ________
You can use number patterns to help you count.

Count by tens.
340, 350, _____, 370, _____, 390

Count by hundreds.
400, 500, 600, _____, 800, _____

Write the missing numbers.
Then circle the counting pattern.

<table>
<thead>
<tr>
<th>Pattern—Count by:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>tens</td>
<td>hundreds</td>
<td></td>
</tr>
</tbody>
</table>

1. 220, 230, _____, 250, _____, 270, 280
2. 510, 520, 530, _____, 550, _____, 570
3. 135, 145, 155, _____, 175, _____, 195
4. 747, 757, _____, _____, 787, 797, 807
5. 200, 300, 400, _____, 600, _____, 800
6. 350, 450, 550, _____, _____, 850, 950
7. 182, _____, 382, 482, _____, 682, 782
Skills Practice
Number Patterns

Write the missing numbers. Then write the pattern.

1. 715, 725, [735], 745, 755
   Each number is __________.

2. 491, _____, 691, _____, 891
   Each number is __________.

3. _____, 839, _____, 837, 836
   Each number is __________.

4. _____, 595, 495, 395, _____
   Each number is __________.

5. 599, 589, 579, _____, _____
   Each number is __________.

Use the pattern to solve.

6. The numbers have fallen off of two houses on Ivy Street. Write the missing house numbers.
   345, 355, _____, 375, _____, 395.

7. Five students are lined up for a race. Each student is wearing a number. Which students are missing?
   708, 608, 508, _____, 308, _____
Preparation: Crayons are needed for this activity.

Color each shape the correct color.

1. Color the cone red.
2. Color the pyramid blue.
3. Color the sphere green.
4. Color the cube yellow.
5. Color the cylinder purple.
6. Color the rectangular prism orange.

7. Draw a yellow line around the cone. Then draw a red line around the sphere.

8. Find the cubes in the picture. Draw a line around them.
Circle the solid shape. Write the name of something in your classroom or outside that is this shape.

<table>
<thead>
<tr>
<th>Name</th>
<th>Solid Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rectangular prism</td>
<td>![Rectangle Prism Image]</td>
</tr>
<tr>
<td>2. cylinder</td>
<td>![Cylinder Image]</td>
</tr>
<tr>
<td>3. cube</td>
<td>![Cube Image]</td>
</tr>
</tbody>
</table>

Solve.

4. Look over this page. Ryan’s soup can looks like one of these shapes. What shape is Ryan’s soup can? ________________

5. Becky is looking for shapes that can stack. What shapes do you see that can stack? ________________________________

______________________________
Name _______________________

11-2

Reteach

*Faces, Edges, and Vertices*

**Preparation:** Crayons are needed for this activity.

![Image of a cube with labels: 12 edges, 6 faces (sides), 8 vertices (corners)]

Write how many faces, vertices, and edges.

<table>
<thead>
<tr>
<th>Solid Figure</th>
<th>Faces</th>
<th>Vertices</th>
<th>Edges</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image of a triangular prism]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>![Image of a rectangular prism]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Find the figure that has one face and a point. Color it blue.

4. Find the figures with the same number of faces. Color them red.

5. Circle the figures that can roll.
Circle the solid shape that is named. Write how many faces, vertices, and edges it has.

<table>
<thead>
<tr>
<th>Name</th>
<th>Shape</th>
<th>Faces</th>
<th>Vertices</th>
<th>Edges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. rectangular prism</td>
<td><img src="image1" alt="Image" /></td>
<td>6</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2. cone</td>
<td><img src="image2" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. cube</td>
<td><img src="image3" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. pyramid</td>
<td><img src="image4" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. sphere</td>
<td><img src="image5" alt="Image" /></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A plane shape is a 2-dimensional figure with only length and width.

- circle
- square
- triangle
- parallelogram
- rectangle
- hexagon
- trapezoid

## 1. Draw a line from the shape to its name.

- trapezoid
- rectangle
- triangle
- hexagon
- parallelogram
Write the name of the figure. Then circle the object that matches the figure.

1. 

2. 

3. 

4. 

Pat drew this picture.

5. 

How many circles? _____ circles
How many squares? _____ squares
How many rectangles? _____ rectangles
Dee is making a pattern out of blocks. She places a cone, a cube, a pyramid, a cone, and a cube. What block comes next?

**Step 1**

**What do I know?**
Dee made a pattern. She used a cone, a cube, a pyramid, a cone, and a cube.

**What do I need to find out?**
What block comes next.

**Step 2**

**Plan**
How will I find the block that comes next?
I will _______ find a pattern _______.

**Step 3**

**Solve**
Find a pattern.

What shape comes next? _______ pyramid _______.

**Step 4**

**Check**
Look back.
Does my answer make sense? _______ yes _______. Can I check my answer? _______.
Reteach (2)

Problem-Solving Strategy: Find a Pattern

Find a pattern to solve. Write your answer.

1. Dave is making a pattern with blocks. He has □ △ □ △. What shape comes next?

2. Jan is making a pattern with blocks. She has a cube, a sphere, a cube, and a sphere. What shape comes next?

3. Randy is making a pattern with blocks. He has a sphere, a cylinder, a rectangular prism, a sphere, and a cylinder. What will be the 7th shape?

4. Rosa says she sees a pattern in the shapes of the signs on her street. She sees a rectangle, a square, a square, a rectangle, a square, and a square. Is she right?
Skills Practice

Problem-Solving Strategy: Find a Pattern

Find a pattern to solve. Write your answer.

1. Josh is drawing shapes.
   He draws \( \bigcirc \bigstar \square \bigstar \square \).
   Is he drawing a pattern? ________________

2. Leo sees this pattern on a poster.
   \( \heartsuit \square \triangle \heartsuit \square \).
   What three shapes come next?
   
   ______  ______  ______

3. Martha is coloring a row of circles. She colors them red, blue, blue, red, blue, and blue. Is there a pattern? _____ Write the pattern. __________________________

4. One elephant has one trunk, two ears, and four legs. Two elephants have eight legs. How many legs do five elephants have? _____ legs

5. For one week, Rob and Katie worked for a neighbor. Rob earned $3 a day and Katie earned $4 each day. How much money did they have at the end of seven days?
   __________________________
Write how many sides and vertices.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Sides</th>
<th>Vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 vertices → 4 sides
Skills Practice
Sides and Vertices

Preparation: Crayons are needed for this activity.

Read the name of the shape. Color it. Tell how many sides and vertices it has.

1. parallelogram
   - 4 sides
   - 4 vertices

2. trapezoid
   - ___ sides
   - ___ vertices

3. circle
   - ___ sides
   - ___ vertices

4. hexagon
   - ___ sides
   - ___ vertices
Reteach

Relate Plane Shapes to Solid Shapes

You can trace a face of a solid shape to find a plane shape.

The two faces of the cylinder are circles.

Use solid shapes. Trace around the shaded face shown. Circle the shape you made.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><img src="diagram.png" alt="Pyramid" /></td>
<td><img src="diagram.png" alt="Circle" /> <img src="diagram.png" alt="Triangle" /> <img src="diagram.png" alt="Square" /></td>
</tr>
<tr>
<td>2.</td>
<td><img src="diagram.png" alt="Cuboid" /></td>
<td><img src="diagram.png" alt="Rectangle" /> <img src="diagram.png" alt="Rectangle" /> <img src="diagram.png" alt="Triangle" /></td>
</tr>
<tr>
<td>3.</td>
<td><img src="diagram.png" alt="Cuboid" /></td>
<td><img src="diagram.png" alt="Circle" /> <img src="diagram.png" alt="Pentagon" /> <img src="diagram.png" alt="Square" /></td>
</tr>
<tr>
<td>4.</td>
<td><img src="diagram.png" alt="Cone" /></td>
<td><img src="diagram.png" alt="Circle" /> <img src="diagram.png" alt="Triangle" /> <img src="diagram.png" alt="Rectangle" /></td>
</tr>
</tbody>
</table>
Skills Practice

Relate Plane Shapes to Solid Shapes

Look at the plane shape in each problem. Circle the solid shape you could use to trace it.

1. [Diagram of circle with cylinder]
2. [Diagram of square with cube, cylinder, and cone]
3. [Diagram of triangle with triangle, cube, and cone]
4. [Diagram of circle with sphere, cube, and block]
5. [Diagram of square with cube, cylinder, and cone]
6. [Diagram of square with cube, cylinder, and cone]
**Reteach**

*Make New Shapes*

**Preparation:** Pattern blocks would be helpful for this activity.

Use \(\triangle\) and \(\square\) to make new shapes.

- 2 triangles can make a parallelogram
- 2 squares can make a rectangle

<table>
<thead>
<tr>
<th>4 sides</th>
<th>4 vertices</th>
</tr>
</thead>
</table>

Use triangles to make more new shapes.

1. Make a trapezoid.

<table>
<thead>
<tr>
<th>Draw the new shape.</th>
<th>How many sides?</th>
<th>How many vertices?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Make a hexagon.

<table>
<thead>
<tr>
<th>Draw the new shape.</th>
<th>How many sides?</th>
<th>How many vertices?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use pattern blocks to make new shapes. Complete the chart.

<table>
<thead>
<tr>
<th>Pattern Blocks</th>
<th>New Shape</th>
<th>How many sides?</th>
<th>How many vertices?</th>
<th>Name of new shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. △ △ △ △ △ △</td>
<td></td>
<td>6</td>
<td>6</td>
<td>hexagon</td>
</tr>
<tr>
<td>2. □ □ □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. □ □ □ △</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solve. Use pattern blocks to help.

4. How many trapezoids do you need to make a hexagon?
   _____ trapezoids

5. Make a rectangle from two squares. Then find how many squares you need to make a bigger square. _____ squares
Mia has a block. It is a plane shape.
It has 6 sides. Each side is the same length.
Which block does Mia have?

**Step 1**

**What do I know?**
Mia has a plane shape.
The shape has 6 equal sides.

**What do I need to find?**
What shape it is.

**Step 2**

**How will I find out the shape?**
I can guess and check. This way, I can tell what I think it is and then check my answer.

**Step 3**

**Guess and check.**
The hexagon has 6 equal sides.

**Step 4**

**Look back.**
Does my answer make sense? **yes**
How can I check my answer?
Reteach (2)  2MG2.0, 2MR2.2

Problem-Solving Investigation: Choose a Strategy

Choose a strategy to solve.

1. Lau has to design a robot for class using solid shapes with 6 faces. What shapes could he use?

2. Fran’s mom gives her an object with 2 faces shaped like circles. Is the object a cake or a party hat? Explain your answer.

3. Two numbers have a sum of 12 and a product of 35. What are the numbers? _____ and _____

4. Toby cuts two triangles out of paper. What is one shape he can make with them?

5. Jan makes a shape out of cardboard. It has 6 faces. Some faces are longer than others. It has 12 edges and 8 vertices. What shape has she made?

6. Two numbers have a difference of 2 and a sum of 16. What are the numbers? _____ and _____

Problem-Solving Strategies
- Draw a Picture
- Act It Out
- Guess and Check
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Choose a strategy to solve.

1. You have 5 coins that total 72¢. What coins do you have?

2. Jeff says he wants to draw a cube. How many faces and vertices will he have to draw?

   ______ faces and ______ vertices

3. Mr. Green told his class to draw a pattern using 3 shapes.

   Meg made this pattern: ★ □ ○

   Is there a pattern? ______

   Draw a pattern with Meg’s shapes.

4. Two numbers have a difference of three and a product of 40. What are the numbers?

   ______ and ______

5. I have two faces. I also have no edges or vertices. What shape am I?

   _____________

Problem-Solving Strategies

- Draw a Picture
- Act It Out
- Guess and Check
Nonstandard Units

Preparation: Connecting cubes and paper clips are needed for this activity. Different units make different measurements. An □ will give a different measurement than a ■ for the same object.

Estimate. Then use □ and ■ to measure.

1. 

about _____ □

measure _________ ■

about _____ ■

measure ______

2. 

about _____ □

measure _____ ■

about _____ ■

measure _____

3. 

about _____ □

measure _________ ■

about _____ ■

measure _____
Skills Practice  
Nonstandard Units

Preparation: Connecting cubes and paper clips are needed for this activity.

Find the object. Estimate. Then use to measure.

1. 

Estimate: about  
Measure: about 

2. glue

Estimate: about  
Measure: about 

Solve.

3. Jim wants to measure his marker with cubes and paper clips. About how many of each unit?

about  
about 

Are your answers the same or different? Explain why.
Measure to the Nearest Inch

Use an inch ruler to measure length.

Estimate: about \( \frac{\cdot}{\cdot} \) inches  Measure: about \( \frac{\cdot}{\cdot} \) inches

Estimate the length of each picture below. Then use an inch ruler to measure.

<table>
<thead>
<tr>
<th>Picture</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. blue crayon</td>
<td>about ( _____ ) inches</td>
<td>about ( _____ ) inches</td>
</tr>
<tr>
<td>2. paper clip</td>
<td>about ( _____ ) inches</td>
<td>about ( _____ ) inches</td>
</tr>
<tr>
<td>3. eraser</td>
<td>about ( _____ ) inches</td>
<td>about ( _____ ) inches</td>
</tr>
<tr>
<td>4. chalk</td>
<td>about ( _____ ) inches</td>
<td>about ( _____ ) inches</td>
</tr>
<tr>
<td>5. stapler</td>
<td>about ( _____ ) inches</td>
<td>about ( _____ ) inches</td>
</tr>
</tbody>
</table>
### Find the object. Estimate.
Then use an inch ruler to measure.

<table>
<thead>
<tr>
<th>Find</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>about ___ inches</td>
<td>___ inches</td>
</tr>
<tr>
<td>2.</td>
<td>about ___ inches</td>
<td>___ inches</td>
</tr>
<tr>
<td>3.</td>
<td>about ___ inches</td>
<td>___ inches</td>
</tr>
</tbody>
</table>

### Solve.

4. Ali makes a row of 75¢ in quarters. Each quarter is about one inch long. About how long is Ali’s row of quarters? Tell how you know. The row is about _____ inches long.

5. Lu measured one ___ centimeter. It was about 4 inches. She put 3 ___ centimeter end to end. About how long was the line of three ___ centimeter? Tell how you know.

The line is about _____ inches long.
You can measure with inches, feet, and yards. A yardstick helps measure larger objects.

About how tall is the desk? Circle the best estimate.

- about 12 inches
- about 1 yard

Think of the real object. Then circle the best estimate.

1. about 5 inches
   - about 5 inches
   - about 2 feet

2. about 24 inches
   - about 24 inches
   - about 7 inches

3. step
   - about 7 inches
   - about 1 foot

4. about 9 inches
   - about 9 inches
   - about 18 inches

1 foot = 12 inches
1 yard = 3 feet

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Skills Practice

Inch, Foot, Yard

Preparation: An inch ruler and yardstick are needed for this activity.

Find the object. Use inches, feet, or yards.

Estimate. Measure each object in the unit shown.

<table>
<thead>
<tr>
<th>Find</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>______ inch</td>
<td>______ inch</td>
</tr>
<tr>
<td>2.</td>
<td>______ feet</td>
<td>______ feet</td>
</tr>
<tr>
<td>3.</td>
<td>______ inches</td>
<td>______ inches</td>
</tr>
<tr>
<td>4.</td>
<td>______ yard</td>
<td>______ yard</td>
</tr>
</tbody>
</table>

Solve.

5. Lita’s scarf is 6 feet long.
   Jill’s scarf is 2 feet shorter.
   How long is Jill’s scarf?
   ______ feet long

6. A wood fence is 15 yards long. An iron fence is 6 yards longer. How long is the iron fence?
   ______ yards long
Reteach (1)

Problem-Solving Strategy: Use Logical Reasoning

Will’s family has these three heights:
6 feet  5 feet  4 feet
Will is the shortest.
Will’s dad is 2 feet taller than Will.
How tall is Will’s sister?

Step 1
Understand

What do I know?
Will is the shortest.
Will’s dad is 2 feet taller than Will.

What do I need to find out?
How tall is Will’s sister?

Step 2
Plan

How will I find out?
I can use logical reasoning.
I will use small steps to solve the problem.

Step 3
Solve

Carry out your plan.
Will is shortest, so he must be ______ 4 feet tall ______.
Will’s dad is 2 feet taller than Will, so he
must be ______ 6 feet tall ______.
One height is left: ______ 5 feet ______.
Will’s sister must be ______ 5 feet tall ______.

Step 4
Check

Look back.
Does my answer make sense?__________
Use logical reasoning to solve.

Show your work here.

1. Rita, Anne, and Mei are in a jumping contest. They jump 2 feet, 4 feet, and 1 yard. Rita’s jump is measured in yards. Mei jumped farther than Anne. How far did Mei jump?
   ______ feet

2. Pablo, Vince, and Jackson have pictures on the art wall at school. Each picture has a different length: 6 inches, 1 foot, and 1 yard. Vince’s picture is the shortest. Pablo’s picture is 6 inches longer than Vince’s picture. Jackson’s picture must be _______ long.

3. Coach Jan records how far three students swim: 3 yards, 7 feet, 1 yard. Cam swims 3 times as far as 1 yard. Trey’s swim is measured in feet. How far does Val swim?
   _______
Name ____________________________

Skills Practice

Problem-Solving Strategy: Use Logical Reasoning

Use logical reasoning to solve. Show your work here.

1. Diane, Cindy, and Yoko have school photos in these sizes: 1 inch, 6 inches, and 11 inches. Yoko’s photo is 5 inches shorter than Cindy’s. Diane’s photo is not the shortest. How tall is Diane’s photo?

_______ inches

2. The zookeeper measures the baby tiger, elephant, and whale. Their lengths are 5 feet, 1 yard, and 4 feet. The baby tiger is shorter than the baby elephant. The longest baby does not live on land. How long is the baby elephant?

_______ feet

3. Juan reads that three towns have 3, 7, and 13 inches of snow. West Town has less snow than Rossville. Rossville has ten inches more than Medford. How many inches does West Town have?

_______ inches
Name ____________________________

12-5

Reteach

Measure to the Nearest Centimeter

Use the centimeter ruler to measure.

The crayon is about 10 centimeters long

Write how many centimeters.

1. ______ centimeters

2. ______ centimeters

3. ______ centimeters

4. ______ centimeters

Line up the zero end of the ruler with one end of the crayon. Read the number at the other end of the crayon.

Grade 2 247

Chapter 12
Skills Practice

Measure to the Nearest Centimeter

Preparation: A centimeter ruler is needed for this activity.

Use a centimeter ruler to measure.

1. [Image of a crayon]
   About _____ centimeters

2. [Image of a crayon]
   About _____ centimeters

3. [Image of a crayon]
   About _____ centimeters

4. [Image of a crayon]
   About _____ centimeters

5. [Image of a crayon]
   About _____ centimeters

6. [Image of a crayon]
   About _____ centimeters

Solve.

7. A book is 13 centimeters long. A crayon is 7 centimeters long.
   How much longer is the book?
   The book is _____ centimeters longer.
Preparation: A centimeter ruler and meter stick are needed for this activity. Use a meter stick to measure the length of larger objects.

1 meter = 100 centimeters

Estimate. Find an object for each length.

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Object</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. about 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>centimeters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. about 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>centimeters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. about 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. about 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>meter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Skills Practice

Centimeter and Meter

Preparation: A centimeter ruler and meter stick are needed for this activity.

Find the object. Use centimeters or meters.
Estimate. Measure each object in the unit shown.

<table>
<thead>
<tr>
<th>Find</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>_______ centimeters</td>
<td>_______ centimeters</td>
</tr>
<tr>
<td>2.</td>
<td>_______ meters</td>
<td>_______ meters</td>
</tr>
<tr>
<td>3.</td>
<td>_______ centimeters</td>
<td>_______ centimeters</td>
</tr>
<tr>
<td>4.</td>
<td>_______ meters</td>
<td>_______ meters</td>
</tr>
</tbody>
</table>

5. Name three things in your classroom that are longer than 25 centimeters but shorter than a meter. Use a meter stick to measure them.

6. Name two things in your classroom that are longer than a meter. Use a meter stick to measure them.
There are 15 minutes in one quarter hour.
Count by fives to find time to the quarter hour.

Write the time to the quarter hour.

1.

11:15

2.

3.

2:15

2:30

2:45
Skills Practice

Time to the Quarter Hour

Use your clock. Draw the minute hand to show the time.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12:15</strong></td>
<td><strong>12:30</strong></td>
<td><strong>12:45</strong></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.</strong></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8:00</strong></td>
<td><strong>8:15</strong></td>
<td><strong>8:30</strong></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2:15</strong></td>
<td><strong>2:30</strong></td>
<td><strong>2:45</strong></td>
</tr>
</tbody>
</table>

Use a pattern to solve.

4. Stu hears the class bell ring at 10:00, 10:15, and 10:30. At what time will the bell ring next? _____

5. A clock tower chimes every quarter hour. Abby hears the chime at 3:30 and at 3:45. When will the clock chime next? _____
Reteach

Problem-Solving Investigation: Choose a Strategy

Kim buys 4 yards of animal stickers. Each sticker is 2 inches long. How many stickers does Kim buy?

**Step 1** What do you know?
- Kim buys \(\frac{4}{1}\) yards of stickers.
- One sticker is \(\frac{2}{1}\) inches long.

**What do you need to find?**
- How many stickers are in \(\_\_\_\_\_\) yards.

**Step 2** Make a plan.

Find the number of stickers in one foot. Then make a table to show the number of stickers in 3 feet or \(\_\_\_\) yard.

Then, a table can tell the number of stickers in \(\_\_\_\_\_\) yards.

**Step 3** Solve

There are \(12 \div 2 = 6\) stickers in one foot.

<table>
<thead>
<tr>
<th>feet</th>
<th>3</th>
<th>6</th>
<th>9</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>yards</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stickers</td>
<td>18</td>
<td>36</td>
<td>54</td>
<td>72</td>
</tr>
</tbody>
</table>

This means there are \(72\) stickers in 4 yards.

**Step 4** Look back.

Check to see if your solution is reasonable.

Read the problem again.

Does your table answer the question? yes no
Reteach (2)

Problem-Solving Investigation: Choose a Strategy

Solve. Show your work.

1. Ms. Jones needs 12 yards of ribbon for the class party. One roll of ribbon is 3 yards long. How many rolls does Ms. Jones need?
   _____ rolls

   | rolls | | | |
   | yards of ribbon | | | |

2. Mr. Karr is a baker. He finishes a batch of bagels every 15 minutes. His first batch is done at 8:30. He bakes 8 batches. What time is he done?
   _____

3. Vic and his dad are at the park at 4:15. The park is 15 minutes from the theater. They want to see a movie at 5:45. How long can Vic and his dad stay at the park?
   _____ hour _____ minutes

4. Mary’s mom is painting her bedroom wall. About one can of paint covers a wall 3 yards high and 4 yards long. Mary’s wall is 8 feet high and 11 feet long. Is one can of paint is enough? Explain.

   ________________________________
   ________________________________
Solve.

1. Kate wants to buy a spool of ribbon. Which spool has the most ribbon?
Spool _____ has the most ribbon

2. Jamal draws a picture 20 inches long and 20 inches wide. He wants to put a ribbon border on it. About how many yards of ribbon does he need? (Hint: Remember, there are 4 sides to a picture).
_____ yard(s)

3. Coach Meg’s watch beeps every quarter hour. It is 1:00 and her watch is beeping. What are the next 3 times her watch will beep?
_____ , _____ , _____

4. Tim measures his shoe. It is 6 inches long. Then, he walks across a room. He puts the heel of his right shoe against the toe of the left shoe. He says the room is about 20 shoes long. About how long is the room in feet?
about _____ feet
1. **Start Time:** 3:00  
   **End Time:** 5:00  
   **Time:** 2 hours

2. **Start Time:** 8:00  
   **End Time:** 9:00  
   **Time:** 1 hour

3. **Start Time:** 10:00  
   **End Time:** 11:00  
   **Time:** 1 hour
Write each start time and end time. Then write how much time has passed.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Start Time</th>
<th>End Time</th>
<th>How long does it take?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Go to Grandma’s</td>
<td><img src="image1.png" alt="Clock" /></td>
<td><img src="image2.png" alt="Clock" /></td>
<td>hours</td>
</tr>
<tr>
<td>2. Movie</td>
<td><img src="image3.png" alt="Clock" /></td>
<td><img src="image4.png" alt="Clock" /></td>
<td>hours</td>
</tr>
<tr>
<td>3. Skating</td>
<td><img src="image5.png" alt="Clock" /></td>
<td><img src="image6.png" alt="Clock" /></td>
<td>hour</td>
</tr>
</tbody>
</table>

Solve. Draw the clock hands to show the time.

4. Anna spends 1 hour doing homework. She starts at 6:30. At what time will she finish her homework?

5. Steve plays in a basketball game that takes 2 hours. The game starts at 7:15. At what time will the game finish?
Reteach

Time Relationships

Preparation: Scissors and glue are needed for this activity.

Use real life examples to help estimate time.

How long does a bath take?

A 15-hour bath is not realistic. A 15-minute bath is realistic.

Cut out the time units below. Glue the correct time units to solve.

1. cook dinner
   45

2. play soccer
   1
Name ____________________________

Skills Practice

Time Relationships

1 minute = 60 seconds   1 week = 7 days
1 hour = 60 minutes   1 month = 4 weeks
1 day = 24 hours   1 year = 12 months or 52 weeks

Circle the best unit to measure the time for each event.

1. to play a game
   [ ] minutes [ ] days
   [ ] minutes [ ] hours

2. to wash your face
   [ ] minutes [ ] hours
   [ ] minutes [ ] hours

3. to write your name
   [ ] months [ ] minutes
   [ ] months [ ] minutes

4. to watch a movie
   [ ] minutes [ ] hours
   [ ] minutes [ ] hours

Solve.

5. Andy and his mom are making noodles. Their directions are torn. How long should they cook the noodles?
   8 ___________
Reteach
Add Hundreds

Preparation: Hundred cubes are needed for this activity. Using a model can help add hundreds.

200 + 300 = ?

count: 100, 200
count on: 300, 400, 500

200 + 300 = 500

Use hundred cubes to model each problem. Write your answer.

1. 100 + 200 =

2. 100 + 300 =

3. 200 + 200 =

4. 100 + 100 =

5. 200 + 300 =

6. 200 + 100 =

7. 400 + 100 =
Skills Practice
Add Hundreds

Add.

1. 4 hundreds + 2 hundreds = ____ hundreds

   \[400 + 200 = \underline{600}\]

2. 3 hundreds + 3 hundreds = ____ hundreds

   \[300 + 300 = \underline{600}\]

3. 5 hundreds + 4 hundreds = ____ hundreds

   \[500 + 400 = \underline{900}\]

4. 200 500 400 700 400

   \[+ 100 + 200 + 300 + 100 + 200\]

Solve.

5. Kal has 400 pennies. His sister also has 400 pennies. How many pennies do they have in all?

   ____ hundreds + ____ hundreds = ____ hundreds

   \[400 + 400 = \underline{800}\] pennies

6. Joy has 300 stickers. Juan has 500 stickers. How many total stickers are there? Write a number sentence to solve.

   ____ hundreds + ____ hundreds = ____ hundreds

   ____ + ____ = ____ stickers
Reteach

Regroup Ones

Preparation: Base-ten blocks are needed for this activity.

You can use cubes to model regrouping.

Find \(247 + 136\).  

\[
\begin{array}{c}
247 \\
+ \ 136 \\
\hline
383
\end{array}
\]

Regroup the ones.
Then add the tens and hundreds.

So, \(247 + 136 = 383\)

Use cubes to model each problem. Regroup blocks to solve.

1. \(129 + 203 = \)  
2. \(262 + 119 = \)  
3. \(288 + 306 = \)  
4. \(469 + 228 = \)
13-2
Skills Practice
Regroup Ones

Preparation: Base-ten blocks are needed for this activity.

Use \( \underline{\hspace{1cm}} \) to add.

1. \[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\square & \square & \square \\
1 & 4 & 6 \\
+ & 1 & 3 \\
\hline
2 & 8 & 5 \\
\end{array}
\]

2. \[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\square & \square & \square \\
2 & 4 & 5 \\
+ & 1 & 2 \\
\hline
3 & 6 & 8 \\
\end{array}
\]

3. \[
\begin{array}{ccc}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
\square & \square & \square \\
1 & 4 & 6 \\
+ & 3 & 9 \\
\hline
4 & 8 & 5 \\
\end{array}
\]

4. \( 271 + 309 = \) _____

5. \( 325 + 106 = \) _____

6. \( 183 + 408 = \) _____

7. \( 262 + 129 = \) _____

8. \( 364 + 317 = \) _____

9. \( 176 + 418 = \) _____

10. \( 237 + 155 = \) _____

11. \( 162 + 318 = \) _____

12. \( 308 + 304 = \) _____

13. \( 219 + 143 = \) _____

Use \( \underline{\hspace{1cm}} \) to solve.

14. Ira has 315 dominoes. Li has 158 dominoes. How many dominoes in all?

_____ dominoes

15. Jose has 224 marbles. Bess has 357 marbles. How many total marbles?

_____ marbles
If there are 10 or more tens, you need to regroup. A model can help regroup tens.

Find 370 + 290. Draw your models.

Use [ ] for hundreds and [ ] for tens.

Regroup 10 tens as 1 hundred!

Add these together

So, 370 + 290 = 660

Use [ ] to add.

1. 290 + 350 = _____
   Show your work here.

2. 120 + 280 = _____
Name _____________________________

13-3
Skills Practice
Regroup Tens

Preparation: Base-ten blocks are needed for this assessment.

Use _____ to add.

1. 

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>+</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

2. \(562 + 354 = \) _____
3. \(352 + 493 = \) _____
4. \(274 + 455 = \) _____
5. \(482 + 185 = \) _____
6. \(183 + 471 = \) _____
7. \(282 + 333 = \) _____
8. \(169 + 160 = \) _____

Solve. Use _____, if needed.

10. Kay has 429 rocks in her collection. She finds 390 more. How many rocks does Kay have?

_______

11. Luis has 543 baseball cards. His sister has 362. How many cards do they have in all?

_______
Maya and Tom want to take a class. Maya has soccer practice until 4:00. Tom has a piano lesson at 6:00. Which class can they take?

### World Cooking Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Time Class Starts</th>
<th>Time Class Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Treats</td>
<td>2:00</td>
<td>3:00</td>
</tr>
<tr>
<td>French Food</td>
<td>3:00</td>
<td>4:30</td>
</tr>
<tr>
<td>Chinese Cooking</td>
<td>4:30</td>
<td>5:00</td>
</tr>
<tr>
<td>Mexican Dinners</td>
<td>5:00</td>
<td>7:00</td>
</tr>
</tbody>
</table>

### Problem-Solving Strategy: Make a Table

**Step 1** Understand

**What do I know?**
Maya is busy until 4:00.
Tom is busy after 6:00.

**What do I need to find out?**
Which cooking class they both can take.

**Step 2** Plan

**How will I find out which class they both can take?**
I will find a class that begins after 4:00 for Maya and ends before 6:00 for Tom.

**Step 3** Solve

**Write down information from the table.**
Maya can make the 4:30 and 5:00 classes.
Tom cannot make the 5:00 class.
They can both take **Chinese Cooking**.

**Step 4** Check

**Look Back.**
How did the table help me to answer the question?
Reteach (2)

Problem-Solving Strategy: Make a Table

Use the tables to solve.

1. A storyteller is coming to the library on Saturday. Jack has a swimming lesson until 12:00. Flora wants to hear a story that is an hour long. Which story should Jack and Flora listen to?

<table>
<thead>
<tr>
<th>Story</th>
<th>Time Story Starts</th>
<th>Time Story Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wolf and the Drum</td>
<td>11:00</td>
<td>12:00</td>
</tr>
<tr>
<td>Old Man Winter</td>
<td>12:30</td>
<td>1:00</td>
</tr>
<tr>
<td>Tina Races the Tiger</td>
<td>1:00</td>
<td>2:00</td>
</tr>
<tr>
<td>Rabbit’s New Vest</td>
<td>2:00</td>
<td>2:30</td>
</tr>
</tbody>
</table>

2. Andre has $3. Then, he buys a gift for his mom.
   - a bunch of daisies $1.50
   - beaded ring $2.00
   - toy cat 40¢
   He has some money left, so he buys the toy cat for his sister. Now Andre has 60¢. What did he buy for his mom?

   ____________________________________________________________

3. Ms. Ling’s class is going to the science museum. She made a list of the activities for the day.

<table>
<thead>
<tr>
<th>Museum Trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>see space models</td>
</tr>
<tr>
<td>see movie: On the Moon</td>
</tr>
<tr>
<td>eat lunch</td>
</tr>
<tr>
<td>See dinosaur bones</td>
</tr>
</tbody>
</table>

How long is the movie? ____________________________________
Skills Practice

Problem-Solving Strategy: Make a Table

Use the table to answer the questions.

Flights to Seattle from Minneapolis:

<table>
<thead>
<tr>
<th>Flight Number</th>
<th>Leaves</th>
<th>Arrives</th>
</tr>
</thead>
<tbody>
<tr>
<td>206</td>
<td>7:10 A.M.</td>
<td>1:20 P.M.</td>
</tr>
<tr>
<td>305</td>
<td>9:30 A.M.</td>
<td>4:00 P.M.</td>
</tr>
<tr>
<td>491</td>
<td>12:50 P.M.</td>
<td>7:00 P.M.</td>
</tr>
<tr>
<td>511</td>
<td>6:05 P.M.</td>
<td>12:15 A.M.</td>
</tr>
</tbody>
</table>

1. Paul leaves for Seattle on Flight 305. Tom leaves on Flight 206. How long will Tom arrive before Paul arrives?

2. Jane is taking Flight 491 to Seattle. The plane leaves an hour late. What time will the plane arrive in Seattle?

3. Three of the four flights will last the same length of time. Which flight is longer than the others?

Complete the table to solve.

4. There are 10 people in each raft. How many people are in 5 rafts? _______ people

<table>
<thead>
<tr>
<th>Rafts</th>
<th>People</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>
Reteach

Estimate Sums

You can estimate to find an answer that is close to the exact answer.

There are 517 people in Cold Creek. There are 281 people in Old Town. About how many people live in the two towns?

Step 1
Look at the tens. Round each addend to the nearest hundred.

517 rounds to → 500
+281 rounds to → +300

Step 2
Add the new addends to find the estimated sum.

500
+300
800

The number of people in the two towns is about 800.

Round each number to the nearest hundred. Estimate each sum.

1. \[489 \rightarrow \quad +311 \rightarrow +\]
2. \[466 \rightarrow \quad +195 \rightarrow +\]

Round each number to the nearest ten. Estimate each sum.

3. \[606 \rightarrow \quad +247 \rightarrow +\]
4. \[307 \rightarrow \quad +258 \rightarrow +\]
13-5
Skills Practice
Estimate Sums

Round each number to the nearest **ten**. Estimate the sum.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>302 →</td>
</tr>
<tr>
<td></td>
<td>+ 287 → +</td>
</tr>
<tr>
<td>2.</td>
<td>686 →</td>
</tr>
<tr>
<td></td>
<td>+ 174 → +</td>
</tr>
<tr>
<td>3.</td>
<td>365 →</td>
</tr>
<tr>
<td></td>
<td>+ 209 → +</td>
</tr>
<tr>
<td>4.</td>
<td>405 →</td>
</tr>
<tr>
<td></td>
<td>+ 325 → +</td>
</tr>
</tbody>
</table>

Round each number to the nearest **hundred**. Estimate the sum.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>518 →</td>
</tr>
<tr>
<td></td>
<td>+ 169 → +</td>
</tr>
<tr>
<td>6.</td>
<td>701 →</td>
</tr>
<tr>
<td></td>
<td>+ 216 → +</td>
</tr>
<tr>
<td>7.</td>
<td>176 →</td>
</tr>
<tr>
<td></td>
<td>+ 315 → +</td>
</tr>
<tr>
<td>8.</td>
<td>390 →</td>
</tr>
<tr>
<td></td>
<td>+ 412 → +</td>
</tr>
</tbody>
</table>

Solve.

9. There are 410 parents and 526 children in the park. Rounding to the nearest hundred, how many people are in the park? _______ people

10. Mr. Tan sells 215 apples on Wednesday and 486 apples on Sunday. Rounding to the nearest ten, how many apples does Mr. Tan sell? _______ apples
Reteach
Add Money

Line up decimal points to add money.

Jim buys the duck and the dog. How much does he spend?

$1.72
+ 2.35
$4.07

Add.  Show your work here.

1. Lee has $5.00. She buys the pig and the cat. How much money does she spend?

2. Sammy buys the duck and the rabbit. How much does he spend?

3. Pam buys the dog and the cat. How much money does she spend?
Skills Practice
Add Money

Solve.

1. \$2.69
   + 3.45

2. \$3.75
   + 1.41

3. \$7.11
   + 1.94

4. \$3.87
   + 0.75

5. \$2.91
   + 5.01

6. \$2.09
   + 3.76

7. \$0.89
   + 5.88

8. \$1.25
   + 1.95

9. \$2.09
   + 2.99

Solve.

10. Amy pays \$3.11 for a sandwich and juice. She pays another 89 cents for an orange. How much does Amy spend on lunch?

11. Mr. Bailey spends \$2.11 for pencils. He spends \$3.47 for a notebook. If he buys a folder for 50 cents, how much will Mr. Bailey spend?
Mia has $4.87 in her piggy bank. Her sister Tanya has $4.21 in her piggy bank. How much money do the sisters have in all?

<table>
<thead>
<tr>
<th>Step 1</th>
<th>What do I know?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understand</strong></td>
<td>Mia has $4.87. Tanya has $4.21.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>How will I find out the total?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plan</strong></td>
<td>I can write a number sentence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Write a number sentence.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solve</strong></td>
<td>+ _______ The sisters have _______ altogether.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Look back.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Check</strong></td>
<td>I wrote a number sentence. I added to find how much money altogether.</td>
</tr>
</tbody>
</table>
1. Dar wants to buy the basketball and the baseball. How much will he spend in all? ______

2. Lonnie has $7.65. He thinks he has enough money to buy the football and the soccer ball. Is he correct? Explain.

3. Name the two most expensive items shown above. What would be the total cost of these two items?

4. Josh buys 2 footballs. Jeff buys 3 basketballs. Who spends more?
Name ____________________________

Skills Practice
Chapter 13

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies
• Use Logical Reasoning
• Make a Chart
• Write a Number Sentence

1. Mrs. Hayes buys her son lunch. Lunch #1 is $3.89. Lunch #2 is $4.19. Lunch #3 is $4.89. Mrs. Hayes orders #2. If her son orders #3, how much will Mrs. Hayes pay?

2. Dale spends $2.85 on bus tickets. His friend Jay spends $3.60 on bus tickets the same day. How much do the two spend on bus tickets in all?

3. Pia wants to buy a doll for $4.27. She wants to buy the same doll for her friend. How much money will Pia spend on both dolls?

4. Sari has 5 dollars. She buys a sandwich for $3.00 and a juice for $1.29. Apples cost $0.89. Does she have enough to buy an apple too?
Use subtraction facts to subtract hundreds.

Find $600 - 300$.

6 hundreds $- 3$ hundreds = _____ hundreds

$600 - 300 = _____$

Subtract.

1. 4 hundreds $- 1$ hundred = _____ hundreds
   
   $400 - 100 = _____$

2. 7 hundreds $- 3$ hundreds = _____ hundreds
   
   $700 - 300 = _____$

3. 8 hundreds $- 5$ hundreds = _____ hundreds
   
   $800 - 500 = _____$

4. 600 500 800 600 500
   
   $- 100$ $- 200$ $- 300$ $- 200$ $- 100$
Skills Practice
Subtract Hundreds

Subtract.

1. 300     800     700     600     600
   - 100     - 300     - 100     - 300     - 200
   200

2. 400     500     600     800     500
   - 100     - 100     - 500     - 100     - 300

3. 500     900     600     700     800
   - 200     - 200     - 400     - 400     - 500

Solve.

4. 900 children are in the park. 700 adults are in the park. How many more children are there than adults? _____ more children

5. 800 people see a movie on Friday. 900 people see the movie on Saturday. How many more people go to the movie on Saturday? _____ more people

Show your work here.
Reteach
Regroup Tens

Remember: regroup 1 ten as 10 ones.

Use the models to subtract.

1. 

\[
\begin{array}{c|c|c}
\text{hundreds} & \text{tens} & \text{ones} \\
\hline
4 & 3 & 7 \\
-2 & 1 & 8 \\
\hline
\end{array}
\]

Use models and WorkMat 7. Subtract.

2. \(321 - 13 = \) ____

3. \(549 - 211 = \) ____

4. \(869 - 5 = \) ____

5. \(623 - 415 = \) ____

6. \(460 - 152 = \) ____

7. \(708 - 26 = \) ____
Skills Practice
Regroup Tens

Preparation: Base-ten blocks are needed for this activity.

Use models and WorkMat 7. Subtract.

1. 

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>– 3</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

2. 

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>– 4</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

3. 

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>– 1</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

4. 

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>– 5</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. 688 – 117 = _____

6. 945 – 538 = _____

7. 573 – 451 = _____

8. 783 – 261 = _____

9. 454 – 344 = _____

10. 857 – 675 = _____

Solve.

11. 377 people see a play on Friday night. 495 people see a play on Saturday. How many more people see the play on Saturday?

_____ people
Preparation: Base-ten blocks are needed for this activity.

**Step 1**
Subtract the ones.
Write how many ones are left.

**Step 2**
Subtract the tens.
Regroup 1 hundred as 10 tens. Write the new number of hundreds and tens in the boxes.

**Step 3**
Subtract the hundreds.
Write how many hundreds are left.

Use models and WorkMat 7. Subtract.

1. $827 - 433 = \underline{394}$
2. $245 - 153 = \underline{92}$
3. $597 - 489 = \underline{108}$
4. $762 - 234 = \underline{528}$
5. $624 - 325 = \underline{299}$
6. $943 - 144 = \underline{859}$
Regroup Hundreds

Preparation: Base-ten blocks are needed for this activity.

Use models and WorkMat 7. Subtract.

<table>
<thead>
<tr>
<th>hundreds</th>
<th>tens</th>
<th>ones</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>− 2</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

1. 567 − 295 = _____
2. 912 − 562 = _____
3. 727 − 382 = _____
4. 838 − 445 = _____
5. 478 − 416 = _____
6. 648 − 377 = _____
7. 346 − 268 = _____
8. 256 − 131 = _____
9. 871 − 596 = _____
10. 158 − 98 = _____

Solve. Show your work.

11. Penny had 347 pumpkins for sale. She sold 255 pumpkins.
    How many pumpkins did Penny have left? _____ pumpkins
Two squirrels collect the nuts from a walnut tree. They collect 119 nuts in all. How many nuts might each of the squirrels collected?

58, 64, 61, 55

**Step 1**

**What do I know?**

2 squirrels collected a total of 119 nuts.

**What do I need to find out?**

How many nuts did each squirrel collect.

**Step 2**

**How will I solve the problem?**

I can guess and check to solve.

**Step 3**

**Guess and Check**

Use guess and check to solve. 

\[58 + 64 = 122\]

That is too many nuts. 

\[61 + 55 = 116\]

That isn’t enough nuts. 

\[58 + 61 = 119\]

That’s the answer!

**Step 4**

**Look back.**

Did I answer the question? Were there any combinations of numbers that could have worked?
Problem-Solving Strategy: Guess and Check

Solve. Circle the correct answers.

1. Jessica and Josh won a total of 68 awards for state talent contests. How many awards might each of them have won?
   23, 45, 15, 54

2. What number am I?
   I am more than 500.
   I have a 7 in the ones place.
   The sum of my three numbers is 15.
   547, 735, 447, 627, 555

3. Ben collects stamps with either of his 2 favorite colors in them.
   He has 55 different stamps. How many and what color might each of the them be?
   30 red, 29 yellow, 25 red, 30 blue

4. Jose, Mick, and Dan helped wash cars on Saturday for their school band. Together, they wash 71 cars. How many cars might each of them wash?
   25, 27, 17, 21, 19
Skills Practice

Problem-Solving Strategy: Guess and Check

Solve. Circle the correct answers.

1. What number am I?
   I am more than 250.
   I have a 3 in the ones place.
   The sum of my three numbers is 9.
   443, 603, 153, 702, 523

2. Tonya and Melissa sell 45 rolls of wrapping paper for their holiday fundraiser. How many rolls might each of them have sold?
   17, 19, 30, 26, 22

3. What number am I?
   I have a 0 in the ones place.
   I am less than 400.
   The sum of my three numbers is 6.
   222, 321, 420, 330, 160

4. In a basketball contest, the team of Ian and Jacob throw 96 shots in 5 minutes. How many shots might each of them throw?
   70, 25, 65, 31, 55
Reteach

Estimate Differences

About how many more miles is it from Chicago to Cleveland than from Chicago to Detroit?

Estimate 315 – 234.

<table>
<thead>
<tr>
<th>From:</th>
<th>To:</th>
<th>Distance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago, IL</td>
<td>Cleveland, OH</td>
<td>315 miles</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Detroit, MI</td>
<td>234 miles</td>
</tr>
</tbody>
</table>

Round to the nearest ten

Round 315 up to 320.
234 is closer to 230 than 240.

315 rounds to 320
- 234 rounds to - 230

The difference in miles is about _____ miles.

Round to the nearest hundred

315 is closer to 300 than 400.
234 is closer to 200 than 300.

315 rounds to 300
- 234 rounds to - 200

The difference in miles is about _____ miles.

nearest ten nearest hundred exact

1. \[ \begin{array}{c}
687 \rightarrow 690 \rightarrow 700 \rightarrow 687 \\
-279 \rightarrow -280 \rightarrow -300 \rightarrow -279
\end{array} \]

2. \[ \begin{array}{c}
571 \rightarrow 570 \rightarrow 600 \rightarrow 571 \\
-194 \rightarrow -190 \rightarrow -200 \rightarrow -194
\end{array} \]
## Skills Practice

### Estimate Differences

Round each number to the nearest ten. Estimate each difference.

<table>
<thead>
<tr>
<th></th>
<th>255</th>
<th>713</th>
<th>926</th>
<th>841</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- 135</td>
<td>- 645</td>
<td>- 406</td>
<td>- 452</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>501</th>
<th>488</th>
<th>377</th>
<th>667</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>- 398</td>
<td>- 216</td>
<td>- 164</td>
<td>- 325</td>
</tr>
</tbody>
</table>

### Round each number to the nearest hundred. Estimate each difference.

<table>
<thead>
<tr>
<th></th>
<th>487</th>
<th>705</th>
<th>376</th>
<th>947</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>- 244</td>
<td>- 280</td>
<td>- 111</td>
<td>- 321</td>
</tr>
</tbody>
</table>

### Solve

4. Mae’s family drives 467 miles on Saturday and 391 miles on Sunday. Rounding to the nearest ten, estimate the difference in miles.

5. Jake’s school has a book sale every year. Last year, the school sold 209 books. They sell 311 books this year. Rounding to the nearest hundred, estimate the difference in books.
Reteach

Subtract Money

Jim has $5.00. He buys the dog. How much money does Jim have left?

\[
\begin{array}{c}
\text{\$5.00} \\
- \text{\$2.35} \\
\hline
\text{\$2.65}
\end{array}
\]

Subtract. Show your work.

1. Pei-Li has $5.00. She buys the pig. How much money does she have left?

\[
\begin{array}{c}
\text{\$5.00} \\
- \text{\ldots} \\
\text{\cdot}
\end{array}
\]

2. Sami has $4.00. He buys the duck. How much money does he have left?

\[
\begin{array}{c}
\text{\$4.00} \\
- \text{\ldots} \\
\text{\cdot}
\end{array}
\]

3. Pam has $4.00. She buys the dog. How much money does she have left?

\[
\begin{array}{c}
\text{\$4.00} \\
- \text{\ldots} \\
\text{\cdot}
\end{array}
\]

4. \[
\begin{array}{ccc}
\text{\$4.74} & \text{\$6.99} & \text{\$5.25} \\
- \text{2.70} & - \text{1.36} & - \text{3.60} \\
\hline
\text{\cdot} & \text{\cdot} & \text{\cdot}
\end{array}
\]
Skills Practice

Subtract Money

Subtract.

1. $4.43  $7.28  $5.82  $6.16
   - 3.29  - 1.19  - 3.67  - 2.46

2. $5.39  $3.63  $5.21  $9.97
   - 2.73  - 1.47  - 2.74  - 5.80

3. $3.91  $8.25  $7.14  $4.29
   - 1.73  - 0.18  - 2.71  - 3.07

Solve.

4. Tim has $6.85. He wants to buy a book for $3.58. He thinks he will still have enough money left to buy a magazine. Is Tim right? Explain your answer.

   ______________________________

   ______________________________

5. Lee has $4.87. His snack costs $3.56. If he buys his snack, does Lee still have $1.00 for the bus?

   ______________________________
Problem-Solving Investigation: Choose a Strategy

Mia has 400 marbles. She gives some to her friend Nate. Mia has 200 marbles left. How many did she give to Nate?

**Problem-Solving Strategies**
- Use a Pattern
- Write a Number Sentence
- Use Logical Reasoning

**What do I know?**
Mia has 400 marbles.
She gives some to Nate.

**What do I need to find out?**
How many marbles she gives away.

**How will I find the number of marbles?**
I will use write a number sentence. This will help me find the answer.

**Write a number sentence.**
\[
\frac{400}{200} = 200
\]
Mia gave Nate 200 marbles.

**Look back.**
Did I write the correct number sentence?
Reteach (2) 2NS2.2, 2MR1.1

Problem-Solving Investigation: Choose a Strategy

<table>
<thead>
<tr>
<th>Problem-Solving Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use a Pattern</td>
</tr>
<tr>
<td>• Write a Number Sentence</td>
</tr>
<tr>
<td>• Use Logical Reasoning</td>
</tr>
</tbody>
</table>

Solve.

1. There are 6 hundred, 5 tens, and 4 ones blocks. Tomas needs 3 hundred, 2 tens, and 4 ones blocks. How many blocks are left?
   _____ blocks

2. Tracy has 100 marbles. She gives away 1 on Monday. She gives away 2 marbles on Tuesday. She gives away 3 on Wednesday. If she continues to give away marbles at this rate, how many marbles will she have left after 1 week?
   _____ marbles

3. Mr. Patel has 237 animals at his pet store. There are 168 birds, gerbils, and hamsters. The rest of the animals are fish. Rounding to the nearest ten, estimate how many fish Mr. Patel has in his store.
   _____
   How many fish are actually there? _____

4. Tyrone has $4.00 to pay for lunch. If his lunch costs $2.87, how much money will Tyrone have left?
   _____
Skills Practice

Problem-Solving Investigation: Choose a Strategy

Problem-Solving Strategies

• Use a Pattern
• Write a Number Sentence
• Use Logical Reasoning

Solve.

1. Mrs. Dahl has 9 hundred, 7 tens, and 8 ones blocks. Al borrows 2 hundreds, 5 tens, and 5 ones blocks. How many blocks are left?
   ______ blocks

2. Nell and Sam save 620 pennies. They put 372 pennies in a blue can. They put the rest in a red can. How many pennies do they put in the red can?
   ______ pennies

3. Mrs. Robbin’s science class plants seeds. On Tuesday 2 seeds sprout. 4 sprout on Wednesday. 6 come up on Thursday. If the pattern continues, how many seeds will have sprouted on Friday in all?
   ______ seeds

4. Josh has $8.50 to buy a present for his dad. He spends $5.97 on the present. He spends another $1.00 for a big ribbon. How much money does Josh have left?
   ______