Thanks for requesting a sample of our new Common Core Teacher Editions. We welcome the opportunity to partner with you in building successful math students.

This booklet is a sample Common Core Standards Teacher Edition for Grade 3 (Table of Contents and first 10 lessons). As other grade level samples become available, you will be able to download them from our website: www.excelmath.com/downloads/state_stds.html

Here are some highlights of our new Common Core Teacher Editions:

1. **The Table of Contents** will indicate Lessons that go further than Common Core (CCS) concepts. There is a star next to lessons that are “an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.” With this information, teachers can choose to teach the concept or skip it.

2. **For each Lesson Plan (each day) we are changing the “Objective”** to “Common Core Objective” (see lesson # 1). On days where lessons are not directly related to CCS, we will offer instruction for the teacher to alter what they do for the Lesson of the Day so they can still teach a Common Core concept. The Objective on those days will look like this (see Lesson #3):

   **Objective**
   Students will identify ordinal numbers, both in words and in sequences.

   **Common Core Alternative**
   Activity #2 may be used instead of the lesson part of the Student Sheet. Have students complete the Basic Fact Practice, Guided Practice and Homework. Send home the letter on the right side of the Lesson sheet to be signed and returned.

3. **Within Guided Practice** when a non CCS concept is one of the practice problems we will indicate it with the star again. (See Answer Key for Lesson #5, Guided Practice Box E)

4. **On Test Days** (see Test #2) we indicate with a star non CCS concepts being assessed.

We are in the very early stages of creating these CCS Teacher Editions. When each one is released, we will have an announcement on our website. Our goal is to have as many grades ready by the fall 2013 as possible (focusing on grades 2-5 first, and then grades K-1 and 6). The student sheets are now ready to ship.

In the meantime, you can find updates plus additional downloads on our website (manipulatives, Mental Math, placement tests in English and Spanish, and lots more): www.excelmath.com/tools.html

Please give us a call at 1-866-866-7026 (between 8:30 - 4:00 Monday through Friday West Coast time) if you have questions about these new Excel Math Common Core Editions.

Cordially,

The Excel Math Team
# Lesson Concept

## PLACE VALUE AND COUNTING

### Place value

1. Tens and ones place
7. Addition of 2 two-digit numbers, regrouping to sums of 10
12. Hundreds places
43. Thousands places
100. Expanded notation for numbers less than 10,000
150. Numbers less than a million

### Recognizing number words

3. Recognizing the ordinal numbers
9. Recognizing numbers less than 100
27. Recognizing numbers less than 1000 with zeros
49. Recognizing numbers less than 10,000 with hundreds place > zero
79. Recognizing any number less than 10,000

### Series and Patterns

2. Recognizing a sequence counting by 1, 2, 5 and 10
6. Filling in missing numbers when counting by 1, 2, 5 and 10
37. Recognizing a sequence counting by 3, 4, and 10
48. Filling in missing numbers when counting by 3, 4, and 10
97. Recognizing a sequence counting by 5 and 6
113. Filling in missing numbers when counting by 5 and 6
155. Filling in missing numbers when the differences form a pattern

### Putting things in order

4. Putting 3 two-digit numbers in order from least to greatest
13. Putting 4 two-digit numbers in order from least to greatest
38. Putting 3 three-digit numbers in order from least to greatest
53. Putting 4 two or three-digit numbers in order from greatest to least
104. Putting 3 four-digit numbers in order

## ADDITION OF WHOLE NUMBERS

### Addition facts

1. Sums up to 10
6. Sums up to 13
13. Sums up to 18
45. Recognizing addition and subtraction fact families
1. Addition of one or two-digit numbers, without regrouping
7. Addition of 2 two-digit numbers, regrouping to sums of 10
8. Addition of 3 two-digit numbers, horizontally
12. Addition of 2 or 3 three-digit numbers, horizontally or vertically, without regrouping
14. Addition of two-digit numbers, with regrouping sums to 13
19. Addition of two-digit numbers, with regrouping sums to 18
29. Addition of three-digit numbers, with regrouping sums to 10s
34. Addition of three-digit numbers, with regrouping sums to 10s or 100s
41. Addition of three-digit numbers, with regrouping twice
43. Addition of four-digit numbers
67. Addition with grouping sums >19 and <30

⭐️ = This is an accelerated Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states. Alternate Common Core activities are included in the Daily Lesson Plan.
Scope & Sequence of Lessons & Activities
by concept, with lesson and page numbers

# Lesson Concept

SUBTRACTION OF WHOLE NUMBERS

Subtraction facts

1 Learning the subtraction facts up through ten
17 Learning the subtraction facts up to 13
24 Learning the subtraction facts up to 18

Multiple Digit Numbers

1 Subtracting two-digit numbers, no regrouping
12 Subtracting three-digit numbers, no regrouping
23 Subtracting two-digit numbers, regrouping to 13
42 Subtracting three-digit numbers, regrouping only with tens and no zero in the tens
42 Subtracting two-digit numbers, regrouping to 18
43 Subtracting four-digit numbers, regrouping only with tens
47 Subtracting three or four-digit numbers, regrouping with tens or hundred
52 Subtracting three or four-digit numbers, regrouping twice
64 Subtracting three or four-digit numbers, regrouping twice with 0 or 1 in tens or hundreds place
136 Subtracting four-digit numbers, regrouping three times

MULTIPLICATION OF WHOLE NUMBERS

Multiplication facts

39 Learning the multiplication facts with 0, 1 or 2 as a factor
46 Learning the multiplication facts with products to 20 and 5 as a factor
53 Learning the multiplication facts with 10, 11 and 12 as factors
68 Learning the multiplication facts with products up to 30
97 Learning the multiplication facts with products up to 40
113 Learning the multiplication facts with products up to 50
131 Learning the multiplication facts with products up to 81

Multiple Digit Numbers

61 Multiplying with one-digit multiplier and two-digit multiplicand, without regrouping
73 Multiplying with one-digit multiplier and two-digit multiplicand, regrouping
91 Multiplying with one-digit multiplier and three-digit multiplicand, without regrouping or regrouping once
131 Multiplying with one-digit multiplier and three-digit multiplicand, regrouping twice

71 Learning multiplication and division fact families
117 Learning multiples
### Scope & Sequence of Lessons & Activities
by concept, with lesson and page numbers

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**TIME - CLOCK**

**Telling time**

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Scope & Sequence of Lessons & Activities
by concept, with lesson and page numbers

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GEOMETRY

2-Dimensional figures

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3-Dimensional figures

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Area, Perimeter and Volume

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| 145| Calculating volume of figures with several layers of cubes

Patterns of shapes

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3rd Grade Lesson Plans and Answer Keys
Lesson 1

Common Core Objective
Students will fluently add and subtract two-digit numbers without regrouping, using strategies based on place value.

Students will recognize the value of tens and ones with numeration blocks and words.

Vocabulary word: array

Preparation
For each student: letter-size piece of paper or Tens Exchange (Regrouping) Board and Ones and Tens pieces (masters on pages M3 and M5)

Lesson Plan
Put 32 crayons in a box. Place three books and two crayons in front of the box. Say, “I counted the crayons in the box. Each time I got 10 crayons I put down a book. The crayons were left over after I made as many groups of ten as I could. How many crayons do you think are in the box?”

Ask how they arrived at their answer. Have one of the students come forward and count crayons to verify the answer. Repeat with several different numbers.

Give each student an Exchange (Regrouping) Board and Tens and Ones Pieces. Point out that the left side of the board is for tens pieces, which represent ten items (books). The right side is for ones pieces (crayons).

Distribute the Lesson Sheets and repeat this process with problems #2 - #9. Point out that the boxes in #2 are in an array (arranged in equal rows). Students should model addition and subtraction problems (#10 - #17) by putting the first number on the board and then adding or subtracting as required. The horizontal problems (#10 and #11) may be easier to solve if they are rewritten in vertical form first.

Explain the CheckAnswer system on the right-hand side of the Lesson Sheet. If you have a Third Grade Projectable Lesson CD (see page i16), it will be easier to point out the CheckAnswer process.

Problems connected with the lesson are numbered, while Homework and Guided Practice sections have letters.

On many Lessons, we provide Basic Fact Practice. Have students complete these before going to the Guided Practice on the back side.

At the end of most lessons we provide a STRETCH challenge to expand student thinking skills. Write the problem on the board in the morning. Reward those who have the answer by the end of the day. Sometimes there may be more than one solution.

Stretch
Write #1 - #3 on the board as shown. Explain that a △ represents 3 buttons, a □ 2 buttons and a ★ 1 button. Then ask, “How many buttons are in each group?”

1. △ + △ + □ (8 buttons)
2. □ + △ + ★ (6 buttons)
3. ★ + □ + △ (6 buttons)
Learning about the tens and ones place; adding and subtracting two-digit numbers; learning addition and subtraction facts up to 10

Ten ones are equal to one ten. Write the numbers represented below.

1 ten and 8 ones
3 tens
6 ones and 2 tens
5 ones

Rewrite horizontal problems into vertical form.

Do the next two examples. If the sum of your answers does not equal the CheckAnswer, then go back and check your work. If you are unable to find your mistake, raise your hand to ask for help.

To check your work, add the answers to your problems and compare the result to the CheckAnswer that is provided. If the two numbers are equal, your answers are correct and you may go on to the next problem. Look at examples 1 and 2.

CheckAnswer  CheckAnswer
2 6 + 2 5 34 3 4 + 2 4 32 27 + 27 59
4 1 - 2 4 32 27 + 27 59
- 6 + 6 32 27 + 27 59

Basic Fact Practice
5 3 4 2 3 9 4 7
+5 +6 +4 +8 +4 +1 +2 +3
10 9 8 10 7 10 6 10

CheckAnswer  CheckAnswer
7 26 + 3 21 10 53 25 10 53 11 + 11 64
10 5 + 5 15

Guided Practice I

3 ones and 2 tens
13 57 + 4 37 17 20 + 2 37 8 97 + 2 - 45 10 52 + 52 62

4 tens
10 24 - 6 + 11 4 35 + 35 39 32 48 + 24 + 5 56 + 5 43 + 43 99

CheckAnswer  CheckAnswer
32 2 = 5 7 5 = 34 3 4 + 13 37 24 37 - 37 2 47
- 2 34 52 + 52 86

Lesson 2

Common Core Objective
Students will identify arithmetic patterns (including patterns in the addition table), will explain them using properties of operations, and will recognize an interval of 1, 2, 5 or 10 in both increasing and decreasing counting sequences.

Preparation
For each student: A copy of the Number Chart (master on page M2)

Lesson Plan
Distribute the Number Charts. Have your students look at the number charts while you read the four numbers in problem #1. Ask them, “Is the direction I am counting decreasing or increasing in value?” Draw an arrow either pointing up or pointing down. For problems #2, 5, and #9 ask by what number you are counting.

Go through problems #2 - #9 before handing out Lesson Sheet 2. Students should circle the correct direction first and then fill in the number by which the sequence is counting.

Go through the instructions for the CheckAnswer on the right side of the page and then let the students do the two problems following the lesson, adding the CheckAnswer on their own. Remind students to show their work so they are not simply copying the CheckAnswer.

Guided Practice
Use the Guided Practice portion of your math lesson to ask students to “explain their thinking.” CCSS stresses the importance of “students making sense of mathematics by describing their thinking.” Asking students to explain their work will help you to determine the students’ depth of understanding and will give you a chance to clear up any misconceptions. Adapt your lesson to the needs of your class. If your students are having difficulty with a concept, take time to practice that concept or reteach it the next day before moving on to the next lesson.

As you anticipate opportunities to reteach, you will be better equipped to address the specific learning needs of your students. Encourage your students to ask for help so they can turn in papers with every answer correct.

Because we constantly review previously taught concepts in Guided Practice, you do not need to look for total mastery for the whole class before moving on to other concepts.

Stretch
Draw the grid below on the board, without the numbers. Tell the students that they can use the digits 0 through 9, but they can only use a digit once. They are to arrange the digits so that the sums of the outside rows and columns all add to 10. There may be more than one solution.

Before they start, ask if the students will be able to use all ten digits. The answer is no because there are 10 digits but only places for 8.

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>
Recognizing a sequence counting by one, two, five or ten

Indicate by what number and in what direction each number sequence is counting:

- (58, 56, 54, 52) up by __
- (52, 51, 50, 49) up by __
- (30, 35, 40, 45) up by __
- (41, 43, 45, 47) up by __
- (60, 70, 80, 90) up by __
- (44, 46, 48, 50) up by __
- (40, 35, 30, 25) down by __
- (25, 24, 23, 22) up by __
- (55, 53, 51, 49) up by __
- (27, 29, 31) counting up by __
- (50, 48, 46, 44) counting up by __
- (75, 77, 79, 81) counting up by __
- (25, 27, 29, 31) counting down by __
- (75, 77, 79, 81) counting down by __

Basic Fact Practice

<table>
<thead>
<tr>
<th>+3</th>
<th>-2</th>
<th>+5</th>
<th>+8</th>
<th>+3</th>
<th>+2</th>
<th>+5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Recognizing a sequence counting by one, two, five or ten

Do the next two examples. If your answers do not agree with the CheckAnswer, go back and check your work. If you cannot find your mistake, raise your hand and ask for help.

The first two examples have mistakes in them. Find the errors and correct them.

<table>
<thead>
<tr>
<th>3</th>
<th>-13</th>
<th>14</th>
<th>13</th>
<th>40</th>
<th>74</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>-16</td>
<td>30</td>
<td>23</td>
<td>24</td>
<td>45</td>
</tr>
</tbody>
</table>

Do the next two examples. If your answers do not agree with the CheckAnswer, go back and check your work. If you cannot find your mistake, raise your hand and ask for help.

<table>
<thead>
<tr>
<th>37</th>
<th>-6</th>
<th>78</th>
<th>31</th>
<th>5</th>
<th>49</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>+5</td>
<td>31</td>
<td>+4</td>
<td>10</td>
<td>+10</td>
</tr>
</tbody>
</table>

Guided Practice 2

<table>
<thead>
<tr>
<th>86</th>
<th>-46</th>
<th>4</th>
<th>40</th>
<th>-3</th>
<th>7</th>
<th>43</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>8</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>41</td>
<td>30</td>
</tr>
</tbody>
</table>

2 ones

4 tens and

3 ones

<table>
<thead>
<tr>
<th>52</th>
<th>-31</th>
<th>23</th>
<th>21</th>
<th>10</th>
<th>3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>-5</td>
<td>28</td>
<td>21</td>
<td>23</td>
<td>26</td>
<td>28</td>
</tr>
</tbody>
</table>

4 ones

2 tens and

3 ones

<table>
<thead>
<tr>
<th>4</th>
<th>25</th>
<th>14</th>
<th>10</th>
<th>32</th>
<th>15</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>+6</td>
<td>39</td>
<td>10</td>
<td>32</td>
<td>46</td>
<td>13</td>
</tr>
</tbody>
</table>

(78, 76, 74, 72)

(40, 45, 50, 55)

(90, 80, 70, 60)

<table>
<thead>
<tr>
<th>58</th>
<th>58</th>
<th>24</th>
<th>13</th>
<th>3</th>
<th>25</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>13</td>
<td>32</td>
<td>34</td>
<td>54</td>
<td>2</td>
<td>54</td>
</tr>
</tbody>
</table>

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Lesson 3

Objective
Students will identify ordinal numbers, both in words and in sequences.

Common Core Alternative
Activity #1 Volume 1: Measuring Volume in Non-Standard Units (on page A2 in the back of this Teacher Edition) may be used instead of the lesson part of the Student Sheet. Have students complete the Basic Fact Practice, Guided Practice and Homework. Send home the letter on the right side of the Lesson sheet to be signed and returned.

Preparation
Write on 19 pieces of paper the ordinal word sequence from First - Nineteenth.

First Second Nineteenth etc.

Lesson Plan
Ask 19 students to come to the front of the room. Distribute the pieces of paper with the ordinal words on them. Explain that ordinals are words that we use to indicate place in a sequence. Each piece of paper has a word representing the student’s place.

Have the students arrange themselves in the proper order. Next, have them call out their place starting with first. If the order is correct, select one of the students and say, “student’s name is ______ in line. How many students are ahead of him/her?” They should answer with the number of students who are ahead of the one selected.

Verify the answer by counting the students that are ahead of the one selected. Ask if they think it matters whether or not you start counting with the student right before the one you selected or with the first one in line. (No. Number has no reference to place in line.)

Distribute Lesson Sheet 3 and go through the problems one at a time. Ask them to decide the place in line in the number sequences by counting from the right instead of the left. The values of the various numerals have nothing to do with their place in line. For example, the numeral “7” is ninth in line from the right.

Please send home the letter on the right side of the Lesson Sheet home to be signed by a student’s parent and returned. There are two versions of this letter (in English and Spanish) in the front of this Teacher Edition and on our website: www.excelmath.com/downloads.html

Stretch
You have a piece of string that you want to cut into 10 pieces. It takes 1 second to make one cut. How long will it take to do the cutting?

Answer: 9 seconds. The ninth cut will create the ninth and tenth pieces.

☆ = This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
Lesson 3

Recognizing ordinals 1st to 19th counting from the left or the right

An ordinal number is a number used to refer to an order or position.

If you are in a line with 3 people ahead of you, you are fourth in line.
If you are thirteenth in line, how many people are ahead of you?

From the left, which number is

Dear Parents,

You can help your child by getting involved with homework. You may not always have time to help, but just showing an interest may really motivate your child.

The problems on the back of this lesson sheet are done in class. Students check their work by adding the answers of two or more problems in a box. They then compare their sum with the CheckAnswer shown at the upper right corner of that box.

Sometimes we find children will add the answers incorrectly rather than ask for help. If parents and teachers work together, we can help the child learn the value of asking for help now, rather than being satisfied with a wrong answer.

Homework is available four nights a week, and will be located on the lesson sheet where this letter appears. Whenever you have the time, please check to see that the answers on your child's homework are added correctly and the calculations are shown.

With your assistance, I look forward to a successful year in mathematics. Please contact me if you need any clarification of our math program.

Sincerely,

I have read this letter and I will do my best to help at home.

_________________________________________________

Parent's signature

Recognizing ordinals 1st to 19th counting from the left or the right

If you are in a line with 3 people ahead of you, you are fourth in line.
If you are thirteenth in line, how many people are ahead of you?

An ordinal number is a number used to refer to an order or position.
Paul is sixteenth in line. _____ people are ahead of him.
Olivia is nineteenth in line. _____ people are ahead of her.

From the left, which number is

Homework is available four nights a week, and will be located on the lesson sheet where this letter appears. Whenever you have the time, please check to see that the answers on your child's homework are added correctly and the calculations are shown.

With your assistance, I look forward to a successful year in mathematics. Please contact me if you need any clarification of our math program.

Sincerely,

I have read this letter and I will do my best to help at home.

_________________________________________________

Parent's signature
Lesson 4

Common Core Objective
Students will apply and extend previous understanding of number sense to put 3 numbers in order and will recognize these symbols that are used to create number sentences: < (less than), > (greater than), and = (equal) to record the results of the comparisons.

Preparation
For each student: Ones and Tens pieces (master on page M3)
For the entire class: A number of small items that students can hold, such as 3 books, 25 pencils and 18 crayons

Lesson Plan
Have three students of different heights come to the front of the room. Have the class arrange them in order from shortest to tallest. Ask the class how they know the students are in correct order. (First student is shorter than second and third, second is taller than first and shorter than third, and third is taller than first and second.)

Next, have three students come to the front of the room, each holding a different number of items. For example, one will have 3 books, another 25 pencils and the third 18 crayons. Ask the class to arrange the students in order from least number of items being held to most number of items and to explain why their answer is correct.

Now have the students take their tens and ones pieces. Ask one student to give you three numbers less than 100. Have the students represent the numbers on their desks. Then have one student come forward and write the numbers in order from least to greatest and explain the answer. (The values in the tens place are looked at first and compared and then the ones.) Do this process three or four times.

Explain that questions will ask, for example, which number is second. They should select the number that is second in the correct order, not second in the original set. A SET is “A number of things grouped together and forming a whole collection.”

Write 34 and 28. Ask a student to come forward and put two dots next to the larger number and one dot next to the smaller number and to connect the one dot with each of the two dots.

34 < 28

The sideways “V” points to the smaller of the two numbers. The number sentence is read “34 is greater than 28”. Repeat with several pairs of numbers. On the board, post the symbols “<” and “>” with the words “less than” and “greater than” underneath. Then put two identical numbers up, and ask what symbol is used the show they are equal. Put the equal symbol up next to the others.

Distribute Lesson Sheet 4 and go through #1 - #12 with the class.

Stretch
Draw the following squares on the board or form them with toothpicks, crayons, pencils, etc. Ask the students if they can remove only two lines and change the model from three squares to two squares. (The lines to remove have an “X” on them.)
Lesson 4

Put each set of numbers in order from least to greatest:

1. (16, 32, 9) 2. (48, 46, 43) 3. (67, 8, 26) 4. (8, 27, 5)

Which number is first? 16 second? 8 third? 48 fourth? 8

The symbols <, >, and = are used to compare two numbers.

The first two symbols point to the smaller of the two numbers.
The third symbol is used when the two numbers are equal.

Draw the correct symbol between each pair of numbers.

36 < 42 9 < 40 71 > 20 51 > 15 27 = 27

Select the numbers from the given sets to fill in the blanks.

3. (24, 22, 25, 23) 4. (42, 37, 8, 25) 5. (53, 29, 35, 40)

Put the numbers in order from least to greatest.

(44, 23, 35) (32, 40, 24, 34, 26) (23, 35, 44)

Select the number from the given set to fill in the blank.

31 + 42 = _____ 73 - 67 = _____

10 - 7 = 3 36 - 16 = _____

4 tens and 6 ones

Which number is first? 40 second? 44

Put the numbers in order from least to greatest.

57 67 - 92 61 25 61 + 61 86

(46, 44, 40) 40 44 46 + 44 84

Which number is first? 40 second? 44

Put each set of numbers in order from least to greatest:

5. (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)

From the left, which number is 4th? 6th? 10th? 11th? 13th? 14th?
Lesson 5

Objective ⭐
Students will interpret information given in circle (pie) graphs and will calculate probability.

Common Core Alternative
Activity #15 in the back of this book (page A28) may be used instead of the lesson part of the Student Sheet. Have students complete the Guided Practice portion. Send home the letter on the right side of the Lesson Sheet to be signed and returned.

Preparation
For the class: a package of jellybeans, a bag

Lesson Plan
The purpose of a circle or pie graph is to visually show how the number of each part relates to the other parts. Open the jellybeans. Arrange them in a circle, grouping like colors together. Mark the center and then draw a line around the outside. Next draw straight lines from the center to the circle, separating each color. Write down the color and number of jellybeans in each section.

Have a student count all of the jellybeans. Print that number on the board “__ total jellybeans.” Ask a student to look at the circle graph and find out how many red jellybeans were in the bag. Print that number on the board so your word sentence reads, “We have 2 red out of 10 total jellybeans.” Do this for each color.

Let the students complete the lesson sheet for the “__ out of ____” questions. On the first blank line, have your students print the number of that color of jellybeans, and on the second blank line have them print the total number of jellybeans in the bag.

Next, put all the jellybeans in a bag. Ask the class, “If I close my eyes and take out one jellybean, which color is it most likely to be? Least likely?” Discuss probability, saying that the number of “chances” of one color being chosen are compared to the “chances” for another color. The chances of choosing a red jellybean are described as (the number of red jellybeans) OUT OF (the total number of jellybeans).

Point out the numbers for each of the colors on the board. The item with the most “chances” has the highest probability of being chosen. The one with the fewest “chances” has the lowest probability of being chosen. Explain that highest probability does not mean that the item will definitely be chosen.

Distribute Lesson Sheet 5. Students will fill in the probability of pulling each color jellybean out of the bag. Looking at the chart below #1 and #2, ask “What is the probability of getting a purple jellybean?” Since there are none, the probability would be 0 out of 10 or impossible. The probability of getting any jellybean is 10 out of 10 or certain. Even though a yellow jellybean has the highest probability of the four colors, it still has only 4 out of 10 chances of being chosen.

The answer for #5 is the bird because the bird portion of the circle covers a larger area than the areas for the other animals. The answer for #6 is the 6 because the probability for the arrow stopping on the 6 is 1 out of 8. The probabilities for the other numbers are all at least 2 out of 8.

On Guided Practice E, a number is provided next to the choices. That number is used for the CheckAnswer.

Our 5th day lessons are usually longer than the other days, so both sides may be used for the lesson content. There is no Homework on the 5th day lessons.

⭐ = This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
Calculating probability; interpreting information given in circle (pie) graphs

Olivia had a bag of red, green, black and yellow marbles. She poured them out on a piece of paper, arranged them by color in a circle, and drew lines between
the colors. She could tell she had more yellow marbles without even counting.

<table>
<thead>
<tr>
<th>Bag of Marbles</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>red</td>
<td>green</td>
<td>black</td>
<td>yellow</td>
<td></td>
</tr>
</tbody>
</table>

What is the sum of all the marbles? **10**

After counting the marbles, she put them back into the bag. If she takes one out without looking (at random), the probability that it will be

- green is **2** out of **10**
- black is **3** out of **10**
- red is **1** out of **10**
- yellow is **4** out of **10**

If she randomly (without looking) takes one out, which color has

- the best chance (highest probability) of being selected? **yellow**
- the lowest probability (least chance) of being selected? **red**

Use the scale above to determine what possibilities could fit in each category. For example, What is the probability of choosing a black or a green marble?

**3 + 2 = 5, so 5 out of 10**

Can you think of when you might use the following words: more likely, equally likely, less likely? For example, How does the probability of choosing black or green marble compare to the probability of red or yellow?

- both are **5 out of 10**, so equally likely
Test 1 & Create A Problem 1

Test 1 covers the concepts that have been introduced on Lessons 1 – 3. The following table shows which concepts are reviewed on this test and on which lesson the concept was first introduced.

<table>
<thead>
<tr>
<th>Q#</th>
<th>Lesson</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Add 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Add 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Add 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Add 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Add 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>Writing numbers given in tens and ones</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>Writing numbers given in tens and ones</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>Writing numbers given in tens and ones</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>Recognize a number series counting by 1,2,5,10</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>Recognize ordinals 1st through 19th</td>
</tr>
</tbody>
</table>

Make a copy of the Score Distribution and Error Analysis charts provided on our website and on pages i20-i22 of this Teacher Edition. Record each student’s identification number on the line indicating the number of problems missed. This distribution of test results will help you show parents how their child did in comparison to the rest of the class – without revealing the identity of the students who scored higher or lower than their child.

Use tally marks on the right side of the chart to record how many students missed each question. There is no need to review the entire test, but you could go over problems missed by a number of students.

Create a Problem 1

The material on the back of tests is used to help students integrate math and writing skills. The stories are designed so your students can observe, analyze and participate in the storytelling. These Create a Problem exercises reinforce concepts that are not easily demonstrated on the Lesson page.

These are optional, and can be used as a continuation of the test, or any time you want to combine literacy with the math lesson. In most cases we create a story that has some numerical content, then ask the students to interact with the story by answering and creating their own questions. These exercises give your students the opportunity to extract data from larger passages of text.

There is no need to keep a formal record of scores on the Create A Problem pages.

🌟 = This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
### A Day at the Pool

Yong’s mother took Yong and three of his friends to the pool last Saturday. They swam for 60 minutes. Since it was such a nice day they decided to play for a while on the grass next to the pool.

At 12 o’clock, Yong’s mother said it was time for lunch. Each child had a turkey sandwich, an apple, a drink and two dates. After lunch they rested and played cards for 50 minutes while Yong’s mother took a nap. She was asleep for 40 minutes.

The kids went back into the pool and swam for 25 more minutes before going home. They had a great time and decided next time they would ask two other friends to join them.

Write a story problem about playing at the pool and solve your problem.

<table>
<thead>
<tr>
<th>Name</th>
<th>How many of Yong’s friends went with him to the pool?</th>
<th>How many total dates did the group of children eat with lunch?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 friends</td>
<td>4 x 2 = 8 dates + 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>How long did Yong’s mother sleep?</th>
<th>How long did they play cards?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40 minutes</td>
<td>4 x 0 = 40</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>5 x 0 = 50</td>
</tr>
</tbody>
</table>

Write a story problem about playing at the pool and solve your problem.
Lesson 6

Common Core Objective
Students will identify arithmetic patterns (including patterns in the addition table) and will recognize an interval of 1, 2, 5 or 10 in both increasing and decreasing counting sequences.

Students will review the addition facts of 11, 12, 13 and will fluently add two-digit numbers.

Preparation
For each student: Number Chart (master on page M2)

For the class: 13 books for stacking on the table

Lesson Plan
Ask the students to look at their number charts while you read out loud the three numbers in problem #1.

Ask, “Is the direction I am counting decreasing or increasing in value?” Draw an arrow either pointing up or pointing down and ask by what number you are counting. Have them tell you how they know.

Once the students have identified the direction the sequence is counting and by what number, ask them what the next number in the sequence will be and what number would have been prior to the sequence. Repeat this process with #2 - #6.

Distribute Lesson Sheet 6 and have the students do #2 - #6 on their own while you observe around the room.

To help illustrate the addition problems at the bottom of the Lesson sheet, put 11 books on a table. Ask the students to tell you the different ways the 11 books can be divided into two separate piles so that each pile will have less than ten. Write them on the board. Repeat this process with sums of 12 and 13.

Erase the board and have the class do the bottom portion on their own.

For Guided Practice N, ask the students to print the number on the line that is in a section smaller than the section with number 6, if you have not taught probability.

For additional practice with addition, subtraction, multiplication and division (or a combination of all four), refer students to our Online Timed Basic Fact Practice: www.excelmath.com/practice.html

Stretch
Draw the grid below on the board, without the numbers. Tell the students that they can use the digits 0 through 9, but they can only use a digit once. They are to arrange the digits so that the sums of the rows and the columns all add to 12.

There may be more than one solution.

Before they start, ask if they will be able to use all ten digits? The answer is no because there are 10 digits but only places for 8.
Find all the pairs of one-digit numbers that add to 11, 12 and 13.

For each number sequence, indicate by what number the sequence is counting and then fill in the missing numbers.

- (30, 35, 40, 45) up by 5
down
- (54, 52, 50, 48) up by 2
down
- (60, 65, 70, 75) up by 10
down
- (41, 43, 45, 47) up by 2
down

Find all the pairs of one-digit numbers that add to 11, 12 and 13.

- 5 + 6 = 11
  + 7 = 12
  + 8 = 13
  + 9 = 14
  + 10 = 15

- 6 + 7 = 13
  + 8 = 14
  + 9 = 15
  + 10 = 16

- 7 + 8 = 15
  + 9 = 16
  + 10 = 17

Which number is second? ______ third? ______

Put the numbers in order from least to greatest.

- (60, 65, 70, 75) counting up by 5
  (23, 25, 27, 29) counting up by 2
  (30, 31, 32, 33) counting up by 1

Select the numbers from the given set to fill the blanks.

- (33, 23, 20)
- (39, 25, 40, 42, 32)

It is highly unlikely the arrow will stop on the ___.
Lesson 7

Common Core Objective
Students will fluently add two two-digit numbers based on place value, using regrouping, with the facts of ten, numeration blocks and the number line.

Preparation
For each student: Tens Exchange (regrouping) Board & Ones and Tens Pieces (masters on pages M3 and M5)

Lesson Plan
Explain that exchange (regrouping) board can only hold 9 on each side. If they have more than 9 ones on the right, they must exchange 10 ones on the right side for 1 ten on the left side.

Ask the students to represent 13 on their boards. Next, they should add 7 ones to the 3 ones. Ask if they need to do any exchanging. At this point write the problem on the board in vertical form and show how the notation shows the 1 ten that has been regrouped from 10 ones. Point out on the number line that 13 plus 7 equals 20.

Repeat this same process with several other examples, using a one-digit number plus a two-digit number.

Next, have the students represent 23 on their boards. Ask what pieces they would add to their boards in order to add 17. Some will answer 1 ten and 7 ones. Ask if 17 ones is also acceptable. Have half the class add 1 ten and 7 ones and the other half 17 ones.

They will find that both give the same result, but the ones adding 17 individual ones have to regroup one group of ten. Write the problem on the board showing the regrouping notation. Repeat this process with several other examples.

Distribute Lesson Sheet 7. Write the example and each of the problems on the board, showing all regrouping notation. Students are to model the problem, with exchanging, on their boards.

For Guided Practice section M, on the first blank line, have your students print the number of green marbles, and on the second blank line have them print the total number of marbles in the box.

If your students haven’t yet learned these concepts, let them skip N.

On this question in N, a number is provided next to the choices. That number is used for the CheckAnswer.

Stretch
Ann and Jerry have 8 dogs. Ann has 4 more dogs than Jerry. How many dogs do they each have?

Answer: If they aren’t sure how to start, suggest the trial and error method until they find a pair of numbers with a sum of 8 and a difference of 4. Ann has 6 dogs. Jerry has 2 dogs.
Regrouping when adding 2 two-digit numbers using the facts of 10

When the ones are combined, you have enough to make another ten.

This 1 is for the ten that came from combining the 3 ones and the 7 ones.

The same problem is shown below on a number line.

Homework

Basic Fact Practice

<table>
<thead>
<tr>
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<th>2</th>
<th>- 2 1</th>
<th>+ 4</th>
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<td>70</td>
<td>39</td>
<td>34</td>
<td>42</td>
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</table>

Lesson 7

Guided Practice 7

Guided Math

Put the numbers in order from least to greatest.

(30, 25, 20, 15, 10)

(55, 53, 51, 49)

Select the number from the given set to fill in the blank.

(42, 13, 35, 62, 39)

Jason is eighteenth in line.

If he chooses one of them out of the box, without looking, the probability it will be green is

2 + 3 + 5 = 10

2 out of 10

From the left, which number is tenth? 20 fifth? 6

It is impossible unlikely highly likely

This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
Lesson 8

Common Core Objective
Students will recognize circles, triangles, squares and rectangles and will understand that shapes in different categories may share attributes.

Students will fluently add and subtract two-digit numbers given in horizontal form.

Vocabulary words: sides, vertices, parallel lines, attributes

Preparation
Draw the following figures on the board: square, rectangle, triangle and circle.

Lesson Plan
Have the students describe each shape using their own words. First have the students describe the various figures in terms of straight and curved lines, open or closed, number of sides and if there are “square” vertices or corners. Also introduce the terminology of parallel lines and attributes even though the words will not appear on their papers at this time.

If the students are not familiar with these terms, point out what you mean on one of the figures and ask how they would describe that characteristic. A square will be shown to be a rectangle on a later lesson. For the time being, a square will not be included when they are asked to identify rectangles. Have the students explain in their own words why the two given shapes are not a rectangle or a circle.

For #1 and #2, remind the class that problems given in horizontal form may be easier to solve if they are first put into vertical form. Some students will still rewrite the entire problem while others will see the shortcut of only rewriting two of them. Allow them to solve the problems either way.

For Guided Practice N, ask your students to circle the crayon color that has a greater number of crayons in the box than white. On the first blank line, have them print the number of green crayons in the box and on the second blank line have them print the total number of crayons in the box.

On this question in N, a number is provided next to the choices. That number is used for the CheckAnswer.

Use the Guided Practice portion of your math lesson to ask students to “explain their thinking.” Asking students to explain their work will help you to determine the students’ depth of understanding. Adapt your lesson to the needs of your class. If your students are having difficulty with a concept, take time to practice that concept or reteach it the next day before moving on to the next lesson.

Because we constantly review previously taught concepts in Guided Practice, you do not need to look for total mastery for the whole class before moving on to other concepts.

Stretch
Penny, Kim and Amanda ran a race. Amanda’s time was faster than Kim’s time but Amanda did not win. Show the order in which they finished the race.

Answer: Penny, Amanda, Kim
Lesson 8

Recognizing circles, triangles, squares and rectangles; adding and subtracting two-digit numbers given in horizontal form

Have the class describe each of these shapes in their own words.

Why is this shape not a rectangle?

Why is this shape not a circle?

Remember to change horizontal problems to vertical.

1. \[12 + 20 + 4 = \quad 21 + 4 + 44 = \quad \frac{21}{36} \]

2. \[2 + 11 + 10 = \quad \frac{4}{23} + \frac{23}{27} \]

Basic Fact Practice

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Homework

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<td>44</td>
<td>21</td>
<td>4</td>
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</tbody>
</table>

Guided Practice 8

1. \[4 \times 9 = \quad 4 \times 39 = \quad 4 \times 40 = \quad \frac{40}{79} \]

2. \[5 \times 5 = \quad 5 \times 40 = \quad \frac{58}{5} \]

3. \[1 \times 3 = \quad 1 \times 13 = \quad \frac{13}{58} \]

4. \[2 \times 3 = \quad 2 \times 32 = \quad \frac{32}{68} \]

5. \[4 \times 5 = \quad 4 \times 32 = \quad \frac{32}{68} \]

6. \[1 \times 3 = \quad 1 \times 14 = \quad \frac{14}{59} \]

7. \[2 \times 5 = \quad 2 \times 54 = \quad \frac{54}{77} \]

8. \[3 \times 5 = \quad 3 \times 54 = \quad \frac{54}{77} \]

9. \[4 \times 5 = \quad 4 \times 34 = \quad \frac{34}{96} \]

10. \[5 \times 5 = \quad 5 \times 34 = \quad \frac{34}{96} \]

11. \[6 \times 5 = \quad 6 \times 34 = \quad \frac{34}{96} \]

12. \[7 \times 5 = \quad 7 \times 34 = \quad \frac{34}{96} \]

13. \[8 \times 5 = \quad 8 \times 34 = \quad \frac{34}{96} \]

14. \[9 \times 5 = \quad 9 \times 34 = \quad \frac{34}{96} \]

Philip is sixteenth in line. \(15\) people are ahead of him.

Crayons in the Box

If Karin takes a crayon out of the box without looking, a \( ______ \) crayon has the highest probability of being selected.

1. white \( 2 \) red
2. yellow \( 3 \) green
3. \( + \) 13
4. \( + \) 18

\( \star \) This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
Lesson 9

Common Core Objective
Students will recognize any number less than 100 and will fluently add and subtract those numbers.

Students will find a number that is greater than or less than a given number.

Preparation
No special preparation is required.

Lesson Plan
Do #1 - #6 with the class. You may want to use the Grade 3 Projectable Lessons CD (see page i16 in this book).

Read #7 - #15 out loud, and in each case ask the students what process they think they need to use to compute the answer and why. If they are having trouble, give them other examples before they go to the problems on the page.

Let the students do #2 - #15 on their own as you walk around the room.

If you have not covered these concepts, have your students skip Guided Practice M.

On this question in M, a number is provided next to the choices. That number is used for the CheckAnswer.

For Guided Practice N, ask your students how many green crayons Ken has (to fill the first blank) and how many total crayons he has (to fill the second blank).

CCSS stresses the importance of “students making sense of mathematics by describing their thinking.” Asking students to explain their work during Guided Practice will help you to determine the students’ depth of understanding and will give you a chance to clear up any misconceptions. Adapt your lesson to the needs of your class. If your students are having difficulty with a concept, take time to practice that concept or reteach it the next day before moving on to the next lesson.

As you anticipate opportunities to reteach, you will be better equipped to address the specific learning needs of your students. Encourage your students to ask for help so they can turn in papers with every answer correct.

Stretch
Three consecutive numbers that add to 6 are 1, 2 and 3 (1 + 2 + 3 = 6). What three consecutive numbers add to 66?

Answer: 21, 22 and 23 (21 + 22 + 23 = 66)
Write a number problem for each of these questions.

1. What number is thirty-seven ______?
2. What number is fifty-one ______?
3. What number is twenty-four ______?
4. What number is fifty-three ______?
5. What number is fifty-nine ______?
6. What number is sixty-two ______?

Put the numbers in order from least to greatest.

(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)

Which number is first? ______  second? ______

Add two to eight.

Add ten to twelve.

Subtract five from eight.

Subtract seven from ten.

Subtract six from ten.

Subtract four from ten.

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is five less than six?

What number is six more than four?

What number is four less than nine?

What number is three more than six?

What number is nine less than eighteen?

What number is three more than six?

What number is five more than forty-seven?

What number is less than twenty?

What number is four less than nine?

What number is three more than six?

What number is nine more than seventy-three?

What number is five less than sixty-five?

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is thirty-seven ______?

What number is fifty-three ______?

What number is fifty-nine ______?

What number is sixty-two ______?

Put the numbers in order from least to greatest.

(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)

Which number is first? ______  second? ______

Add two to eight.

Add ten to twelve.

Subtract five from eight.

Subtract seven from ten.

Subtract six from ten.

Subtract four from ten.

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is five less than six?

What number is six more than four?

What number is four less than nine?

What number is three more than six?

What number is nine less than eighteen?

What number is four more than twenty?

What number is five less than sixty-five?

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is thirty-seven ______?

What number is fifty-three ______?

What number is fifty-nine ______?

What number is sixty-two ______?

Put the numbers in order from least to greatest.

(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)
(26, 20, 24)

Which number is first? ______  second? ______

Add two to eight.

Add ten to twelve.

Subtract five from eight.

Subtract seven from ten.

Subtract six from ten.

Subtract four from ten.

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is five less than six?

What number is six more than four?

What number is four less than nine?

What number is three more than six?

What number is nine less than eighteen?

What number is four more than twenty?

What number is five less than sixty-five?

What number is one more than fifty-nine?

What number is nineteen less than fifty-nine?

What number is thirty-seven ______?
Lesson 10

**Common Core Objective**
Students will generate measurement data by measuring lengths to the inch and half inch and plotting the data on a line plot.

Students will learn to follow directions on a map and know how to reference a location using north, south, east, and west.

**Preparation**
For each student: rulers, graph paper (*masters on pages M7, and M29*)

**Lesson Plan**
Give each student a ruler. The Lesson Sheet shows a map of a community. In the United States, maps are laid out with north toward the top of the page, west to the left, east to the right and south toward the bottom of the page. Not all cultures draw their maps this way!

Let your students measure lengths of the streets (1 inch = 1 mile) and find the distance from the bike to various buildings in the city. Write the various distances on the board. Talk about which distances are greater than the distance to the Elementary School. Which distances are less than the distance to the bank? Compare several distances in this way. Help the class determine the greatest and least distances. Draw a number line on the board using half inch increments with these extremes. Mark an X for each distance shown. Xs can “pile up” above repeated values.

Have your students skip questions 1-5. Let them complete the Guided Practice and Homework portions of the Student Sheet. For Guided Practice E, if you have not taught probability, have the students circle the fruit in the largest section.

**Mapping Option**
When we look at a map, we look for the north-south-east-west symbol that will show how the places on the map relate to “the real world”. The Lesson Sheet explains the word intersection and gives the abbreviations for avenue and street.

Go through #1 - #3 with the class. Ask them if they are walking east on C Street, is the Post Office on their left or right? What if they are walking west on C Street? Being on the left or the right depends on the direction in which they are walking.

For #4, they need to draw a small map. They can draw vertical and/or horizontal lines using graph paper, depending on the question.

As they read where the person is walking, they move their pencils along the correct line in the correct direction and make the end of the line the point of an arrow. This will help them have the correct perspective to be able to answer the question.

**Stretch**
A man paid $2 to have a steel cable cut once, into 2 pieces. How much will he have to pay to have it cut into 6 pieces?

Answer: The rope will need to be cut 5 times so the answer is $10.

☆ = This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
How would you tell someone to get to the post office?
Example:
Go east on E St. 1 block
Go north on 3rd Ave. 2 blocks
After crossing C St. it will be on the right side of Third Ave.
Is there another way to get to the post office? Go 1 block north on 2nd Ave.
1 block east on D St.
1 block north on 3rd Ave.

How would you tell someone to get to the donut shop?
Go 3 blocks north on 2nd Ave. The donut shop will be on the right side of 2nd Ave. before B St.

Which choice is the shortest route from the gas station to the pet store?
A. Go east on D St. 1 block
   Go north on 3rd Ave. 2 blocks
   Go east on C St. 1 block
   Go north on 3rd Ave. 3 blocks
B. Go south on 2nd Ave. 1 block
   Go east on E St. 1 block
   Go north on 3rd Ave. 3 blocks
C. Go north on 2nd Ave. 2 blocks
   Go west on B St. 1 block
   Go east on B St. 1 block

Ashley needs to deposit her paycheck at the bank, which is located at the intersection of Oak St. and Birch Ave. on the east side of Oak St. If she walks north on Oak St., when she comes to Birch Ave. the bank will be on the ______ side of Oak St.

Nathan needs to return some books at the library, which is located on the west side of Pacific Rd. If he drives south on Pacific Rd., the library will be on the ______ side of Pacific Rd.

Put the numbers in order from least to greatest.
Which number is second?

Select the number from the given set to fill in the blank.

Guided Practice 10

Put the numbers in order from least to greatest.
Which number is second?

On which fruit will the arrow most likely stop?
Test 2 covers the concepts that have been introduced on Lessons 1 – 6. The following table shows which concepts are reviewed on this test and on which lesson the concept was first introduced.

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<th>Q#</th>
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<th>Concept</th>
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<td>1</td>
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</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
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<td>6</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
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<td>Add two or 3 2-digit numbers, no regrouping</td>
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<td>10</td>
<td>1</td>
<td>Subtract two 2-digit numbers, no regrouping</td>
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<tr>
<td>11</td>
<td>4</td>
<td>Put 2-digit numbers in order</td>
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<tr>
<td>12</td>
<td>6</td>
<td>Fill in missing numbers counting by 1, 2, 5, 10</td>
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<tr>
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<tr>
<td>20</td>
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<td>Calculate probability</td>
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Make a copy of the Score Distribution and Error Analysis charts provided on our website and on pages i20 - i22 in this Teacher Edition. Record on the left side of the chart the student’s identification number on the line indicating the number of problems missed.

Use tally marks on the right side of the chart to record how many students missed a particular question. There is no need to review the entire test, but you could go over problems missed by a number of students.

This distribution of test results will help you show parents how their child did in comparison to the rest of the class without revealing the identity of the children who scored higher or lower than their child.

Create A Problem 2

The material on the back of tests is used to reinforce certain concepts that are not easily demonstrated on the Lesson section of the page. The word problems are designed so your students can observe, analyze and participate in the stories. This page may be used as a continuation of the test if your students are comfortable with reading and solving word problems.

This story talks about soccer practice. We ask the students to write their own math problem based on information in the story and then solve the problem.

☆ = This is an advanced Excel Math concept that goes beyond Common Core Standards for Grade 3 but may be required by some states.
Create A Problem 2

Soccer Practice

It is Andi’s first year playing soccer. She really enjoys the sport. Her team practices for two hours, three times a week. Their coach has them do stretching exercises for 10 minutes to warm up, then they run around the track for fifteen minutes.

The time they spend getting ready for practice is not as much fun as kicking the ball. Usually they spend twenty minutes running with the ball and kicking it back and forth with a partner. They practice throwing for 10 minutes and then shoot the ball towards the goal. They finish by dividing into two teams and playing a 30 minute game.

Andi gets home by 6 o’clock. She is tired, but she is always ready for the next practice.

HINT: Circle all the numbers and number words so they are easy to find when you answer the questions.

Practice ends when they divide into two teams and play for a ______ minute game. ______ minutes. ______ minutes.

They practice throwing the ball for ______ minutes. ______ minutes. ______ minutes.

The team runs around the track for ______ minutes. ______ minutes. ______ minutes.

Write a story problem about the time spent preparing for soccer matches and answer your question.

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