

## READ ME FIRST

### *Investigations ©2012 for the Common Core State Standards...*

#### **A focused, comprehensive, and cohesive program for grades K-5**

In updating *Investigations* 2<sup>nd</sup> edition to encompass the Common Core State Standards and Mathematical Practice, the TERC authors carefully considered the what, where, when, and how to do this to ensure and maintain its cohesive curriculum. Carefully considering and analyzing the Common Core standards to determine what they actually asked for, the authors then determined where the new content to be added made the best connection for student learning. They added Common Core content at appropriate points by building on current content, contexts and representations already in the curriculum to create the comprehensive and cohesive program: *Investigations ©2012 for the Common Core State Standards*.

- New content is addressed in Teaching Notes and Math Notes where the content already existed, but connection to the standards needs to be more explicit.
- New content is addressed in Classroom Routines and Ten-Minute Math when the content in the Standards is more about practice than deepening understanding.
- New content is addressed in new Sessions when the mathematical idea can be extended and/or explained with one or two new Sessions.
- New content is addressed in a new Investigation when mathematical content extends beyond what was in the curriculum.

All of these new Sessions build on existing contexts and representations within the grade level, rather than introducing new contexts and representations used in a higher grade level. In some instances it may appear that a single new Session addresses a new concept. But, that new concept will be further developed and integrated into subsequent routines, games, homework, and practice pages.

Some sessions are recommended by the authors to be skipped to allow for new Common Core material. Before making these decisions, the authors carefully considered how it would impact the integrity of the grade level, of the curriculum. *Investigations ©2012 for the CCSS* program maintains coherence, focus and clarity to support all K-5 students in making sense of mathematics and learning that they can become mathematical thinkers.

The foundation of this Scope and Sequence is the Scope and Sequence found in the *Implementing Investigations* book at each grade level. This Common Core Scope and Sequence includes all Common Core content new to the *Investigations*, 2nd edition curriculum.

Math Focus Points from Sessions in *Investigations and the CCSS* guidebook are color-coded. **Color Key** to *Investigations ©2012 for the Common Core* Scope and Sequence:

#### **BLUE**

- indicates new Math Focus Points based on Common Core content in new Sessions
- indicates new Sessions that support Math Focus Points already in the program

#### **GREEN**

- indicates new Math Focus Points based on Common Core content in Classroom Routines and Ten-Minute Math
- indicates new Math Focus Points based on Common Core content in the Common Core Adaptations: Teaching Notes, and Math Notes

#### **RED**

- indicates Math Focus Points from sessions that the TERC authors recommend to be skipped, based on Common Core State Standards

## Number and Operations

**Counting and Quantity** Developing strategies for accurately counting a set of objects by ones and groups

### Unit 1 Math Focus Points

- counting sets of up to 60 objects
- developing strategies for counting accurately
- counting the quantity in more than one way
- developing and analyzing visual images for quantities up to 10
- counting by groups of 10

### Unit 3 Math Focus Points

- looking at patterns and developing fluency with skip counting by 2s, 5s, and 10s
- considering the relationship between skip counting and grouping
- counting by groups of 2, 5, and 10
- noticing and describing a 2:1 relationship (e.g., there are 2 legs for every 1 person)
- solving problems that involve equal groups
- knowing that the size of the group remains constant no matter how it is counted (by 1s, 2s, 5s, or 10s)

**Counting and Quantity** Counting by equal groups

### Unit 3 Math Focus Points

- investigating numbers that can and can not be made into groups of two or two equal groups
- understanding that any number that can be divided into groups of two can also be divided into two equal groups (and vice versa)
- characterizing even and odd numbers as those that do or do not make groups of two (partners) in two equal groups (teams)
- considering whether observations about even or odd numbers apply to all even numbers or all odd numbers

### Unit 5 Math Focus Point

- counting by and adding equal groups, such as 2s and 5s

### Unit 6 Math Focus Points

- skip counting by 2s, 5s, and 10s
- identifying patterns in the multiples of 2, 5, and 10
- using the relationship between 5 and 10, and between nickels and dimes, to solve problems
- thinking about the structure of 100 in terms of groups of 5 and 10
- recognizing that the numbers 100, 200, 300 represent groups of 100 (5A.3)

### Unit 8 Math Focus Point

- counting a set of objects by equal groups

**Counting and Quantity** Developing an understanding of the magnitude and sequence of numbers up to 1,000

### Unit 1 Math Focus Points

- using the number line to reason about, and keep track of information about, the magnitude and relationship of numbers
- developing an understanding of the structure of the 100 chart
- counting, writing, and reading numbers sequentially from 1 to 100 and beyond
- identifying and using patterns in the structure of the number system

### Unit 6 Math Focus Points

- becoming familiar with the structure of the 100 chart
- developing fluency with the sequence of numbers from 1 to 100
- finding and using patterns in the sequence of numbers
- using the 100 chart to reason about, and keep track of information about, the magnitude and relationship of numbers

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- reading and writing 3-digit numbers (5A.2, 5A.3, 5A.4)

**Whole Number Operations** Making sense of and developing strategies to solve addition and subtraction problems with totals up to 1,000

### Unit 1 Math Focus Points

- generating equivalent expressions for a number
- comparing two amounts under 45 to find the difference
- combining two quantities, with totals up to 45
- visualizing, retelling, and modeling the action of addition and subtraction (as removal) situations
- using known combinations (e.g., combinations that make 10) to compose, decompose, and combine numbers
- subtracting a quantity from a whole of up to 30
- solving addition and subtraction (as removal) story problems
- doubling a quantity

### Unit 3 Math Focus Points

- using known combinations to add two or more numbers
- comparing a number to 20 to find the difference
- visualizing, retelling, and modeling the action of a variety of addition and subtraction situations
- developing strategies for solving a variety of addition and subtraction story problems with totals up to 45 and recording work
- solving problems with an unknown change
- combining coins to a total of 50¢
- solving an addition problem by counting on for breaking numbers apart
- visualizing, retelling, and modeling the action of addition and subtraction situations with an unknown start (2.5A, 2.7)

## Grade 2 Scope and Sequence

- developing strategies for solving addition and subtraction problems with an unknown start and recording work (2.5A)

### Unit 4 Math Focus Point

- developing strategies for combining multiple addends

### Unit 6 Math Focus Points

- developing efficient methods for adding and subtracting 2-digit numbers
- adding tens and ones to combine 2-digit numbers
- adding 2-digit numbers by keeping one number whole
- noticing what happens to the tens place when a multiple of 10 is added or subtracted
- adding 10 (or 100) to and subtracting 10 (or 100) from a given number and describing what part of the number changes (5A.1, 5A.2, 5A.3, 5A.4)
- naming and comparing strategies for adding and subtracting 2-digit numbers
- determining the difference between a number and a multiple of 10 up to 100
- adding 2-digit numbers
- adding multiples of 5 and 10, up to 100
- adding coin amounts, up to \$1.00
- determining the difference between a given amount and \$1.00
- adding and subtracting 10 in multiples of 10 to/from any number
- subtracting amounts from 100 or \$1.00, down to 0

### Unit 8 Math Focus Points

- subtracting amounts from 100
- visualizing, retelling, and modeling the action of addition and subtraction situations
- developing efficient methods for adding, subtracting, and notating strategies (4.4)
- solving subtraction problems by subtracting in parts

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- solving a subtraction problem by keeping one number whole and subtracting the other in parts by place (5A.3, 5A.4)
- subtracting numbers where it is necessary to regroup the number of tens (or hundreds) in the total amount (5A.4)
- solving subtraction problems by adding up or subtracting back to find the difference
- comparing problems in which the amount subtracted differs by 1
- adding 2-digit numbers by keeping one number whole
- adding 2-digit numbers by adding tens and ones
- noticing what happens to place value when two 2-digit numbers with a sum of over 100 are combined
- noticing what happens to the place value when two numbers are combined and there are more than 10 ones in the ones place or 10 tens and tens place (5A.2)
- adding two 3-digit numbers by combining hundreds, tens, and ones (5A.1, 5A.2)
- thinking about what happens if you subtract 1 more or 1 less
- adding 2-digit and 3-digit numbers accurately and efficiently (5A.5)
- solving comparison problems by finding the difference between two measurements

**Whole Number Operations** Using manipulatives, drawings, tools, and notation to show strategies and solutions

### Unit 1 Math Focus Points

- establishing use of tools, routines, and expectations for math class
- using standard notation ( $>$ ,  $<$ ,  $+$ ,  $-$ ,  $=$ ) to describe arrangements of cubes, to record expressions that equal a given number, to compare quantities, to represent addition and subtraction situations, and to represent doubling

## Grade 2 Scope and Sequence

- using the number line to reason about, and keep track of information about, the magnitude and relationship of numbers
- recording strategies for solving problems, including addition and subtraction story problems
- using equations to record
- connecting standard notation for addition and subtraction ( $+$ ,  $-$ ,  $=$ ) to the quantities and actions that the signs and symbols represent
- using a rectangular array to model doubling

### Unit 3 Math Focus Points

- using the calculator as a mathematical tool
- using standard notation ( $+$ ,  $-$ ,  $=$ ) to represent a variety of addition and subtraction situations, including an unknown start (2.5A)
- telling stories to match given equations
- using tally marks to represent groups of 5
- recording numbers using expanded notation (4.4, 4.5)

### Unit 6 Math Focus Points

- writing an equation that represents a problem
- developing efficient methods for notating addition and subtraction strategies
- visualizing and making jumps of multiples of 5 on the 100 chart
- using the 100 chart and the number line to model addition
- using coins to model adding 5s and 10s
- using  $<$  and  $>$  notation to compare numbers (5A.1)
- representing 2-digit and 3-digit numbers using expanded form (5A.2, 5A.3, 5A.4)

### Unit 8 Math Focus Points

- using cubes and the number line to show how addition combinations are related
- representing the action of subtraction and addition situations using notation ( $-$ ,  $+$ ,  $=$ )

**Whole Number Operations** Understanding the properties of addition and subtraction

Unit 3 Math Focus Points

- considering whether reordering three addends results in the same total
- considering a generalization about reordering addends for all numbers
- considering whether reordering the numbers in a subtraction problem results in the same total
- considering the relationship between addition and subtraction **(2.5A)**

**Whole Number Operations** Adding even and odd numbers

Unit 8 Math Focus Points

- characterizing even and odd numbers as those that do or do not make groups of two (partners) in two equal groups (teams)
- investigating what happens with partners and teams when two groups are combined
- finding combinations of odd and even numbers that make given numbers or determining that these combinations are not possible
- making and testing conjectures about adding even and odd numbers
- making and justifying generalizations about adding even and odd numbers **(5A.5)**

**Computational Fluency** Knowing addition combinations to  $10 + 10$

Unit 1 Math Focus Points

- developing and achieving fluency with the make  $10 + 1$  and  $+2$  addition combinations
- finding two addends that make 10
- finding the missing addend to make a total of 10
- doubling a quantity
- developing fluency with the doubles combinations

Unit 2 Math Focus Points

- reviewing known addition combinations (combinations of 10,  $+1$ ,  $+2$ )
- developing fluency with the doubles combinations to  $10 + 10$
- achieving fluency with the doubles combinations **(2.4, 2.5, 2.6)**
- developing fluency with the subtraction facts related to the Plus 1, Plus 2, and Make 10 addition combinations **(1.1A, 2.10A)**

Unit 3 Math Focus Points

- relating the doubles and near-doubles combinations
- developing fluency with the near-doubles combinations
- adding 10 to any number (or any number to 10)
- developing fluency with the  $+10$  combinations
- achieving fluency with the near-doubles combinations
- achieving fluency with the subtraction facts: doubles combinations **(1.2, 4.6)**

Unit 4 Math Focus Points

- achieving fluency with the  $+10$  combinations
- developing fluency with subtraction facts related to near doubles combinations **(1.4A)**

Unit 5 Math Focus Point

- developing fluency with subtraction facts related to the Plus 10 combinations **(1.1, 1.2, 2.5)**

Unit 6 Math Focus Point

- practicing addition combinations and related subtraction facts **(1.2)**

Unit 7 Math Focus Point

- reviewing subtraction facts **(1.1)**



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### Unit 8 Math Focus Points

- relating unknown combinations to known combinations
- developing and achieving fluency with the + 9 and remaining combinations **(5A.5)**

### Unit 9 Math Focus Points

- developing fluency with the subtraction facts related to the +9 addition combinations and remaining subtraction facts **(1.1A)**
- achieving fluency with subtraction facts **(3.6A)**

## The Base-Ten Number System

Understanding the equivalents of one group and the discrete units that comprise it

### Unit 1 Math Focus Points

- identifying coins and their values
- identifying how many pennies each coin is worth
- identifying and using coin equivalencies

### Unit 3 Math Focus Points

- identifying coins and their values
- identifying and using coin equivalencies
- recognizing that the first digit of a 2-digit number designates the number of groups of 10 and the second digit designates the number of ones
- solving problems about 10s and 1s
- using a place-value model to represent a number as 10s and 1s
- finding as many combinations of a number as possible, using only 10s and 1s
- recognizing that different combinations of 10s and 1s for the same number are equivalent (e.g., 4 tens and 6 ones = 3 tens and 16 ones, etc.)

### Unit 6 Math Focus Points

- organizing cubes into 10s and 1s
- using a place-value model to represent a number as 10s and 1s

## Grade 2 Scope and Sequence

- using coin equivalencies
- working with the relationship between 1, 10, and 100
- using a place value model to represent and compare 3-digit numbers as 100s, 10s, and 1s **(5A.2, 5A.3, 5A.4)**
- identifying the value that each digit in a 3-digit number represents **(5A.5)**

### Unit 8 Math Focus Point

- representing 3-digit numbers using a place value model **(5A.1, 5A.2, 5A.3, 5A.4)**
- representing a 3-digit number as hundreds, tens, and ones **(5A.1, 5A.2, 5A.3, 5A.4)**

**Rational Numbers** Understanding fractions as equal parts of a whole

### Unit 7 Math Focus Points

- finding equal parts of a whole and naming them with fractions, e.g.,  $\frac{1}{2}$  is one of two equal parts;  $\frac{1}{3}$  is one of three equal parts, and so on)
- naming fractional parts that have numerators greater than 1 (e.g.,  $\frac{2}{3}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$ )
- showing one half of an object
- determining whether a block is half of another block
- determining whether a region is half of a given rectangle
- seeing different ways to make fourths of a square
- recognizing the equivalence of different fourths of the same object
- identifying  $\frac{2}{3}$ ,  $\frac{2}{4}$ , and  $\frac{3}{4}$  of regions
- seeing different ways to make halves, thirds, and fourths of a circle **(2.3A)**
- identifying halves, thirds, and fourths of regions, including circles **(2.3A)**

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**Rational Numbers** Understanding fractions as equal parts of a group

Unit 7 Math Focus Points

- finding equal parts of a whole and naming them with fractions, e.g.,  $\frac{1}{2}$  is one of two equal parts;  $\frac{1}{3}$  is one of three equal parts, and so on)
- finding one half of a set
- finding thirds and fourths of sets
- finding fractions of sets
- solving problems about finding halves of quantities in different contexts
- solving problems that result in mixed numbers

**Rational Numbers** Using terms and notation

Unit 7 Math Focus Points

- learning the term *one half* and the notation  $\frac{1}{2}$
- learning the term *one fourth* and the notation  $\frac{1}{4}$
- learning the term *one third* and the notation  $\frac{1}{3}$
- learning the terms and notation for fractions that contain more than one part (e.g.,  $\frac{2}{3}$ ,  $\frac{2}{4}$ , and  $\frac{3}{4}$ )
- learning the terms and notation for mixed numbers (e.g., one and a half and  $1\frac{1}{2}$ )
- using the term *semi-circle* to describe one half of a circle (2.3A)

## Patterns and Functions

**Linear Relationships** Describing and representing ratios

Unit 5 Math Focus Points

- describing the relationship between two quantities in a constant ratio situation
- using tables to represent the ratio relationship between two quantities

## Grade 2 Scope and Sequence

- finding the value of one quantity in a constant ratio situation, given the value of the other

**Using Tables and Graphs** Using tables to represent change

Unit 5 Math Focus Points

- connecting numbers in a table to the situation they represent
- using conventional language for a table and its parts: rows, columns
- describing the pattern in the numbers in a column in interpreting the pattern in terms of the situation the table represents
- describing what is the same about situations that look different but can be represented by the same table
- describing how the two numbers in the row of a table are connected to the situation the table represents
- using information in the table to determine the relationship between two quantities

**Number Sequences** Constructing, describing, and extending number sequences with constant increments generated by various contexts

Unit 5 Math Focus Points

- extending a repeating pattern
- identifying the unit of a repeating pattern
- creating a repeating pattern that has the same structure as, but different elements than, another repeating pattern (e.g., a red-blue pattern and a clap-tap head pattern)
- defining even and odd numbers
- determining and describing the number sequence associated with one of the elements in an AB, ABC, ABCD, or AABBC patterns (e.g., 2, 4, 6, 8, ...; 3, 6, 9, ...; 1, 4, 7, ...)

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- determining the element of a repeating pattern associated with a particular counting number in AB, ABC, ABCD, or AABBC patterns (e.g., what color is the 8th element in a red-blue repeating pattern?)
- Determining how and why the same number sequence can be generated by different contexts

### Data Analysis

#### Data Analysis Sorting and classifying data

##### Unit 4 Math Focus Points

- grouping data into categories based on similar attributes
- sorting a set of data by two attributes at one time **(1.3A)**
- sorting the same set of data in different ways **(1.3A)**

#### Data Analysis Representing data

##### Unit 4 Math Focus Points

- representing a set of data sorted into categories **(1.4A)**
- using a Venn diagram to represent a sorted set of data **(1.3A)**
- using equations to show how the sum of the responses in each category equals the total responses collected
- comparing ways of organizing data
- comparing representations of a set of data
- ordering, representing, and describing a set of numerical data
- representing data on a line plot
- **representing data using a bar graph (1.4A)**

#### Data Analysis Describing data

##### Unit 1 Math Focus Point

- making predictions about data

##### Unit 4 Math Focus Points

## Grade 2 Scope and Sequence

- describing what the data show about the groups surveyed **(1.3A)**
- interpreting a data representation including a line plot
- **reading and interpreting information represented on a bar graph (1.4A)**
- describing important features of a data set
- describing a set of numerical data
- comparing two sets of data
- developing a hypothesis based on a set of data

#### Unit 9 Math Focus Point

- **making observations about data based on line plot representations (1.5)**

#### Data Analysis Designing and carrying out a data investigation

##### Unit 1 Math Focus Point

- collecting, counting, representing, discussing, interpreting, and comparing data

##### Unit 4 Math Focus Points

- choosing a survey question **(1.3)**
- making a plan for collecting data
- making predictions about data to be collected
- collecting and recording data from a survey
- interpreting and sharing results from a data investigation

### Geometry

#### Features of Shape Composing and decomposing 2-D and 3-D shapes

##### Unit 1 Math Focus Point

- fitting shapes together to cover an area

##### Unit 2 Math Focus Points

- combining shapes to make a new shape



- covering the region, without gaps or overlaps, with a single shape or multiple shapes
- covering a region, without gaps or overlaps, using different shapes
- combining 3-D shapes to make a 3-D whole
- drawing 3-D shapes

**Features of Shape** Describing, identifying, comparing, and sorting 2-D and 3-D shapes

Unit 2 Math Focus Points

- describing attributes of and sorting 2-D shapes (including: pentagon, hexagon and, octagon) (1.1, 2.1)
- identifying names and attributes of 2-D (including: pentagon, hexagon and, octagon) (2.2) and 3-D shapes
- attending to the features of 3-D shapes, particularly the number and shape of faces
- identifying categories for 2-D shapes
- identifying a 3-D shape by touch
- sorting polygons by the number of sides (including: pentagon, hexagon and, octagon) (2.1)
- sorting quadrilaterals by angle
- identifying quadrilaterals as shapes with 4 sides
- identifying rectangles as 4-sided shapes with 4 right angles
- identifying important features of a rectangle
- defining *biggest* in different ways
- ordering rectangles from biggest to smallest
- recognizing that rectangular prisms have rectangular faces
- recognizing which faces of a rectangular prism are the same size and shape
- constructing a rectangular prism from rectangles
- visualizing and describing rectangular prisms
- comparing rectangular prisms

**Features of Shape** Exploring mirror symmetry  
Unit 2 Math Focus Points

- describing and identifying objects and designs that have mirror symmetry (3.1)
- constructing 2-D and 3-D symmetrical designs with mirror symmetry (3.1, 3.2)
- reflecting a shape across a line of symmetry (3.2, 3.3)
- exploring symmetry by folding and cutting paper patterns (3.3)
- identifying lines of symmetry (3.4)
- orienting shapes so that a line of symmetry aligns with a mirror (*Shapes* software) (3.2, 3.3)
- determining what makes a design symmetrical (3.4)

### Measurement

**Area Measurement** Visualizing the structure of arrays

Unit 2 Math Focus Points

- defining *biggest* in different ways
- ordering rectangles from biggest to smallest
- covering rectangles with arrays of tiles
- arranging square tiles in rectangular arrays
- constructing and describing rectangular arrays of tiles
- making different rectangular arrays using the same number of tiles
- drawing rectangles by attending to the lengths of the sides

**Linear Measurement** Understanding length

Unit 9 Math Focus Points

- comparing two lengths
- using direct and indirect comparison to identify equal lengths
- identifying length and width as different dimensions of an object

### Linear Measurement Using linear units

#### Unit 9 Math Focus Points

- iterating units to measure length
- estimating in calculating the length using units that are related by a 2:1 ratio
- identifying strategies for accurate measurement
- considering sources of measurement error
- understanding the different-sized units yield different counts (the smaller the unit, the higher the count) **(3.6A)**
- establishing the need for and using a common unit in order to compare measurements
- identifying and labeling partial units
- recognizing that, given equal counts of two different units, the larger unit marks off a longer length
- using inches and centimeters to describe lengths **(3.6A)**

### Linear Measurement Measuring with standard units

#### Unit 9 Math Focus Points

- establishing the need for and using a standard unit of measure
- creating and using a 12-inch measuring tool
- iterating a 12-inch measuring tool
- measuring lengths that are longer than 12 inches **(3.6A)**
- using a ruler as a standard measuring tool
- comparing a variety of measurement tools
- becoming familiar with the terms *inches*, *feet*, *yards*, *centimeters*, and *meters* as standard units of measure
- using inches, feet, yards, centimeters, and meters to describe lengths
- comparing centimeters and inches

### Time Representing time and calculating duration

#### Unit 9 Math Focus Points

- representing time as a horizontal sequence **(4.1)**
- connecting a time, its digital notation, and its representation on an analog clock to a timeline **(4.1, 4.2, 4.3, 4.4, 4.6)**
- naming and using notation for times that are 30 and 15 minutes before or after the hour **(4.6)**
- associating times with daily events **(4.2)**
- using a timeline to determine duration **(4.2, 4.3, 4.4, 4.5, 4.6)**
- moving forward and backward along the timeline in multiples of hours, half hours, and quarter hours **(4.3, 4.4, 4.5)**
- using a timeline to show a 24-hour period **(4.4, 4.5)**
- recording events on the timeline **(4.5)**

### Classroom Routines

#### How Many Pockets?

#### Units 2–3 and 5–9 Math Focus Points

- making predictions about data
- collecting, counting, representing, discussing, interpreting, and comparing data
- counting by groups
- counting a quantity in more than one way
- using known combinations (i.e. combinations that make 10) to combine numbers
- developing strategies for solving addition problems with many addends
- using a place value model to represent a number as 10s and 1s
- recognizing that the first digit of a 2-digit number designates the groups of 10 and the second digit designates the number of ones
- identifying coins and their values

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- identifying and using coin equivalencies

### Today's Number

#### Units 1–9 Math Focus Points

- generating equivalent expressions for a number
- recording numbers using expanded form (U5 1.2, 1.5; U85A.3, 5A.4)
- developing fluency with addition and subtraction
- using standard notation (+, −, =) to record expressions and write equations
- using the number line and 100 Chart to reason about the magnitude and relationship of numbers
- skip counting by 2s, 5s, and 10s
- identifying patterns in the multiples of 2, 5, and 10

### Quick Images

#### Units 1–9 Math Focus Points

- developing and analyzing visual images for quantities up to 10
- developing fluency with the addition combinations to  $10 + 10$
- using known combinations (i.e. combinations that make 10) to combine numbers
- recreating images of dots arranged in two by five arrays
- using standard notation (+, −, =) to write equations
- identifying names and attributes of 2-D shapes (including: pentagon, hexagon and, octagon) (U2 1.1, 1.5)
- compare and contrast attributes (number of sides/number of angles) of 2-D shapes (including: pentagon, hexagon and, octagon) (U2 2.3)
- using arrays and standard notation (+, =) to represent doubles to  $10 + 10$
- combining groups of tens and ones

## Grade 2 Scope and Sequence

- adding or subtracting 10 to/from a two-digit number
- noticing what happens to the tens place when a multiple of 10 is added or subtracted to/from a two-digit number
- identifying coins and their values
- adding coin amounts
- using ratio relationships to solve problems
- solving problems about an unknown change

### What Time Is It?

#### Units 1–9 Math Focus Points

- using clocks as tools for keeping track of and measuring time
- naming, notating, and telling time to the hour, half-hour, and quarter hour on digital and analog clocks
- associating times on the hour and half-hour with daily events
- determining what time it will be when given start and elapsed times that are multiples of 15 minutes
- determining the number of minutes in hours, half hours, and quarter hours
- counting by 5s
- seeing a timeline as a representation of events over time
- using a timeline to keep track of and compare time and events
- determining the length of a given interval (e.g., 8:30 to 9:30) or activity (e.g., math class)
- solving problems involving elapsed time