

## Young Scholars of Western Pennsylvania Charter School

### 2nd Mathematics YSWPCS

- Units

Unit 1 Introduction

#### Concepts

- Math Messages and number sequence
- Tools and Coins
- Calendars and Clocks
- Partner Study Routines
- Grouping by Tens
- Math Boxes
- Working in small groups
- Number Grids
- Equivalent names for numbers
- Counting Patterns
- Relations and home links
- Explorations
- Progress Check

#### OCDEL Standards

2.0A. 2 Operations and Algebraic Thinking

2.0A.3

2.NBT.1 Number and Operations in Base Ten

2. NBT.8 Use Place Value understanding and properties to and subtract

2.1.2. B Numbers, Number Systems and Number Relationship

2.2.2.A Computation and Estimation

2.3.2.A, B, C, D Measurement and Estimation

#### Common Core Standards

2.1.2.A: Demonstrate relationship between numbers and quantities, including place value, one-one correspondence, rote counting, twos, fives, and tens; comparing values of whole numbers up to 500

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including coins) up to 500

2.1.2.D: apply place value concepts and base ten numeration to order and compare numbers to 500

2.1.2.E: apply patterns to represent numbers in various ways (skip counting, repeated addition/subtraction)

2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situations

2.11.2.A: Order whole numbers, 0 to 500, with least to greatest value.

### **2.1.2.B:**

Represent equivalent forms of the same number through the use of pictures and concrete objects (including penny, nickel, dime, quarter, and dollar), up to 500.

CC.2.1.2.B.1: Use place value concepts to represent amounts of tens and ones and to compare three digit numbers.

CC.2.1.2.B.2: Use place value concepts to read, write, and skip count to 1000.

CC.2.1.2.B.3: Use place value understanding and properties of operations to add and subtract within 1000.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

CC.2.4.2.A.2: Tell and write time to the nearest five minutes using both analog and digital clocks.

CC.2.4.2.A.3: Solve problems and make change using coins and paper currency with appropriate symbols.

### Vocabulary

- base-10 blocks
- calendar
- cube
- equivalent
- even number
- exploration
- farehneit
- flat
- is equal to
- is less than

- long
- lost and found box
- number line
- number scroll
- odd number
- ordinal number
- pattern block template
- program
- slate

#### Assessment(s)

- Daily Assessments pg. 8
- Unit 1 Assessment

#### Duration

17 days

#### • Units

Unit 2: Addition and Subtraction Facts

#### Concepts

- Addition Number Stories
- Review easy Addition facts
- Double facts
- Turn-around facts and the +9
- Addition strategies that use double facts
- Fact families
- Explorations: Exploring weights and scales
- Name collections
- Frames and Arrows routines
- "What's My Rule? Routines
- Counting strategies for subtraction
- Shortcuts for "Harder" subtraction facts
- Progress Check 2

#### OCDEL Standards

2.0A.1,2,3-Operations and Algebraic Thinking

2.NBT. 2, 8.9 Understand Place Value and use place value understanding and properties to add and subtract

2.1.2.A and E Numbers, Number Systems and Number Relationships

2.3.2. F Measurement and Estimation

#### Common Core Standards

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including coins) up to 500

2.1.2.E: Apply patterns to represent numbers in various ways (skip counting, repeated addition/subtraction)

2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situations

2.11.2.A: Order whole numbers, 0 to 500, with least to greatest value.

2.1.2.F: Use the inverse relationships between addition and subtraction to determine unknown quantities to solve problems.

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

CC.2.1.2.B.3: Use place value understanding and properties of operations to add and subtract within 1000.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

### Vocabulary

- 0-9 Facts -/+
- addition fact
- addition number story
- arrow
- arrow rule
- column
- diagonal
- difference
- double facts
- fact family
- fact power
- facts table
- fact triangle frame
- Frames-and-arrows diagrams
- function machine
- heavier
- in balance (balanced)
- label

- lighter
- name-collection box
- number model
- ounce
- pan balance
- pound
- row
- spring scale
- subtraction number story
- sum
- turn-around facts
- unit box

#### Assessment(s)

- Daily Assessment-pg. 86
- Unit 2 Test

#### Duration

17 days

#### • Units

Unit 3: Place Value, Money, and Time

#### Concepts

- Numeration and Place Value
- Using Coins to Buy Things
- Telling Time
- Explorations: Exploring Numbers, Time, and Geoboards
- Data Day: Pockets
- Frames and Arrows having two rules
- Making change by counting up
- Coin exchange
- Progress check

#### OCDEL Standards

2.0A. 1,2 Operations and Algebraic Thinking

2. NBT.1, 1a Understand place value

2.NBT.2, 3, 4 Understand place value

2.1.2.A Numbers, Number Systems and Number Relationships

2.2.2 A Computation and Estimation

2.5.2. B Mathematical Problem Solving and Communication

#### Common Core Standards

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including coins) up to 500

2.1.2.E apply patterns to represent numbers in various ways (skip counting, repeated addition/subtraction)

2.1.2.A: Demonstrate the relationship between numbers and quantities, including place value; one-to-one correspondence; rote counting; counting by twos, fives and tens; and comparing values of whole numbers up to 500.

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including penny, nickel, dime, quarter, and dollar), up to 500.

2.1.2.D: Apply place value concepts and base-ten numeration to order and compare whole numbers up to 500.

2.1.2.E: Apply number patterns to represent numbers in various ways (skip counting, repeated addition/subtraction).

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.3.2.B: Use tools to estimate and measure in standard units

2.6.2.A: Gather data from surveys and observations within the classroom or homes.

2.6.2.B: Organize and display data using pictures, tallies, charts, bar graphs and pictographs.

2.6.2.C: Describe data displayed in a diagram, graph or table.

2.8.2.F: Describe, compare, and answer questions about data on classroom graphs and charts.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools.

CC.2.4.2.A.2: Tell and write time to the nearest five minutes using both analog and digital clocks.

CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.

2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situations

### Vocabulary

- Analog Clock
- bar graph
- base-10 blocks
- clock face
- digital clock
- dime

- exact change light
- hour hand
- make change by counting up
- middle number
- minute hand
- nickel
- \$1 bill
- penny
- picture graph
- predict
- quarter
- range

#### Assessment(s)

- Daily Assessment pg. 176
- Unit 3 Assessment

#### Duration

13 days

#### • Units

Unit 4: Addition and Subtraction

#### Concepts

- Change-to-more number stories
- Parts-and-total number stories
- Explorations: Exploring Temperature, money, and shapes
- Temperature Change
- Estimating costs
- A shopping Activity
- Exploring length, area, and attributes
- Paper-and-Pencil Addition Strategies
- The Partial-sums addition algorithm
- Progress Check 4

#### OCDEL Standards

2.0A. 1, 2 Operations and Algebraic Thinking

2. NBT. 1, 1a Number and Operations in Base Ten

2. NBT.2 Understand Place Value

2. NBT. 5, 6, 7, 9 Use place value understanding and properties to add and subtract.

#### Common Core Standards

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including coins) up to 500

2.1.2.D: apply place value concepts and base ten numeration to order and compare numbers to 500

2.5.2.A: Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts.

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

2.2.2.D: Estimate values, sums, and differences of quantities and conclude the reasonableness of those estimates

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

#### Vocabulary

- Algorithm
- attribute blocks
- ballpark estimates
- centimeter
- change diagram
- change-to-more number story
- degree marks
- degree celsius
- degree fahrenheit
- inch
- mental arithmetic
- parts and total diagram
- parts and total number story
- thermometer

#### Assessment(s)

- Daily Assessmentmts pgs. 240
- Unit 4 Assessment

#### Duration

14 days

- Units

Unit 5: 3-D and 3-D Shapes

Concepts

- Exploring Rules, Sharing and Time
- Points and Line Segments
- Parallel Line Segments
- Exploring Polygons, Arrays, and Attributes
- Quadrangles
- 3-Dimensional Shapes
- Pyramids
- Line Symmetry
- Progress Check

OCDEL Standards

2.oA.1, 2, 4 Operations and Algebraic Thinking

2.NBT., 5. 7 Use Place Value Understanding and Properties to add and subtract

Common Core Standards

2.8.2.C: recognize, describe, extend, create, and replicate a variety of patterns including attribute, activity, number, and geometric patterns

2.8.2.E: use concrete objects, symbols and numbers to represent mathematical situations

2.9.2.A: Name, describe and draw/build 2- and 3-dimensional shapes

2.9.2.B: Identify and draw lines of symmetry.

CC.2.3.2.A.1: Analyze and draw two- and three-dimensional shapes having specified attributes.

Vocabulary

- angle
- apex
- base

- cone
- congruent
- cube
- curved surface
- cylinder
- edge
- endpoint
- face
- flat surface
- heptagon
- hexagon
- hexagonal pyramid
- kite
- line symmetry
- line segment
- line symmetry
- octagon
- parallelogram
- pentagon
- pentagonal pyramid
- point
- polygon
- pyramid
- quadrangle
- rectangle
- rectangle prism
- rectangular pyramid
- rhombus
- side
- sphere
- square
- square corner
- square pyramid
- straightedge
- symmetrical
- trapezoid
- triangle
- triangular pyramid
- vertex
- vertices

#### Assessment(s)

- Daily Assessments pg. 310
- Unit 5 assessment

#### Duration

13 days

- Units

## Unit 6: Whole Number Operations and Number Stories

### Concepts

- Addition of Three or More Number
- Comparison Number Stories
- Data Day: Five Food Groups
- Mixed Addition and Subtraction Stories
- Subtraction Strategies
- Exploring Arrays, Coins, and Division
- Multiples of Equal Groups
- Array Number Stories
- Multiplication with Arrays
- Division
- Progress Check

### OCDEL Standards

2.0A. 1, 2.4 Operations and Algebraic Thinking

2. NBT. 5, 6, 7, 9. Use place value understanding and properties to add and subtract

### Common Core Standards

2.1.2.F: use inverse relationships between addition and subtraction to determine unknown quantities to solve problems

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.2.2.B: Add and subtract single and double digit numbers with and without regrouping to include problems with money

2.2.2.D: estimate values, sums, and differences of quantities and conclude reasonableness of those estimates

2.8.2.D: use a rule to find a missing element that makes an addition or subtraction sentence true

2.5.2.A: Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts.

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.3.2.A: Demonstrate that a single object has different attributes that can be measured in multiple ways.

2.4.2.A: Use models and number facts to draw conclusions and explain reasons for conclusions.

2.6.2.B: Organize and display data using pictures, tallies, charts, bar graphs and pictographs.

2.6.2.C: Describe data displayed in a diagram, graph or table.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

CC.2.2.2.A.3: Work with equal groups of objects to gain foundations for multiplication.

CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.

#### Vocabulary

- bar graph
- basic food groups
- comparison diagrams
- comparison number story
- data table
- difference
- division
- equal grouping
- equal groups
- equal sharing
- multiplication
- multiplication diagram
- multiplied by
- remainder
- times
- trade
- x by y array

#### Assessment(s)

- Daily Assessment pg. 370
- Unit 6 Assessment

#### Duration

14 days

#### Units

Unit 7: Patterns and Rules

## Concepts

- Patterns in counting
- Extending Complements of 10
- Mental Arithmetic: A Basketball game
- Patterns in Double and Halves
- Explorations: Exploring weights, equal sharing, and patterns
- Data Day: Standing jumps and arm spans
- Middle Value (Median) of a set of data
- Frequency distributions
- Progress Check

## OCDEL Standards

2. NBT. 4, 5, 6, 7 Understand place value

-Use place value understanding and properties to add and subtract

## Common Core Standards

2.1.2.F: use inverse relationships between addition and subtraction to determine unknown quantities to solve problems

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.2.2.B: Add and subtract single and double digit numbers with and without regrouping to include problems with money

2.2.2.D: estimate values, sums, and differences of quantities and conclude reasonableness of those estimates

2.8.2.D: use a rule to find a missing element that makes an addition or subtraction sentence true

2.5.2.A: Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts.

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.4.2.A: Use models and number facts to draw conclusions and explain reasons for conclusions.

2.6.2.B: Organize and display data using pictures, tallies, charts, bar graphs and pictographs.

2.6.2.C: Describe data displayed in a diagram, graph or table.

2.6.2.D: Analyze representations of data and compare the data from two categories.

2.6.2.E: Identify patterns and predict trends based on a comparison to data displayed in a graph.

2.7.2.E: Ask and answer questions about predictions and actual outcomes based on data.

2.1.2.A: Demonstrate the relationship between numbers and quantities, including place value; one-to-one correspondence; rote counting; counting by twos, fives and tens; and comparing values of whole numbers up to 500.

CC.2.1.2.B.3: Use place value understanding and properties of operations to add and subtract within 1000.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.

#### Vocabulary

- arm span
- double
- half
- line plot
- median
- middle value
- multiple of 10
- sort (the data)

#### Assessment(s)

- Daily Assessments pg. 546
- Unit 7 assessment

#### Duration

12 days

#### • Units

Unit 8: Fractions

#### Concepts

- Equal parts on one
- Explorations: Exploring fractions, multiplication and division, and volume
- Collections of things

- Equivalent fractions
- Equivalent fractions using fraction cards
- Comparing Fractions
- Fraction Number Stories
- Progress Check

#### OCDEL Standards

2.0A. 2, 4: Operations and Algebraic Thinking

2.MD. 5 Measurement and Data

2.G. 3 Geometry

#### Common Core Standards

2.1.2.C: use drawings or models to show the concept of a fraction as part of a whole; use whole numbers and simple fractions (halves, thirds, and fourths) to represent quantities

2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situations.

CC.2.3.2.A.2: Use the understanding of fractions to partition shapes into halves, quarters, and thirds.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

#### Vocabulary

- congruent
- cubic centimeter
- denominator
- equivalent
- equivalent fractions
- fraction
- numerator
- ONE (the whole)
- unit fraction
- volume

#### Assessment(s)

- Daily Assessments pg. 598
- Unit 8 assessment

#### Duration

11 days

- Units

Unit 9: Measurement

Concepts

- Measuring with yards and meters
- Linear Measures
- Fractional Unites of Length
- Perimeter
- Measuring Longer Distances
- Explorations: Exploring Capacity, Area, and Measures
- Area
- Capacity
- Weight
- Progress Check

OCDEL Standards

2.0A. 2 Operations and Algebaric Thinking

2. NBT. 5 Use place understanding and properties to add and subtract

2 MD. 1, 2., 3, 4 Measure and estimate lengths in standard unit.

2. MD. 9 Represent and interpret data

2.G.2 Geometry

Common Core Standards

2.3.2.A: Demonstrate that a single object has different attributes that can be measured in multiple ways

2.3.2.B: Use tools to estimate and measure standard units

2.3.2.F: Estimate and verify measurement of length, weight, and capacity.

2.1.2.C: Use drawings or models to show the concept of a fraction as part of a whole; use whole numbers and simple fractions (halves, thirds, and fourths) to represent quantities.

2.2.2.A: Develop fluency in the use of basic facts for addition and subtraction

2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.7.2.C: Write the likelihood of an event as a simple fraction (e.g.,  $\frac{1}{2}$ ).

CC.2.1.2.B.3: Use place value understanding and properties of operations to add and subtract within 1000.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.2: Use mental strategies to add and subtract within 20.

CC.2.3.2.A.2: Use the understanding of fractions to partition shapes into halves, quarters, and thirds.

CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools.

CC.2.4.2.A.6: Extend the concepts of addition and subtraction to problems involving length

### Vocabulary

- area
- capacity
- centimeter
- cup
- decimeter
- foot
- gallon
- gram
- inch
- kilogram
- kilometer
- liter
- meter
- mile
- millimeter
- ounce
- perimeter
- pint
- pound
- quart
- scale
- square centimeter
- standard unit
- surface
- weigh
- yard

### Assessment(s)

- DAily Assessment pg. 650
- Unit 9 assessment

### Duration

13 days

### Units

## Unit 10: Decimals and Place Value

### Concepts

- Money
- Decimal Notation for Pennies and Dimes
- Money amounts with a calendar
- Using a calculator to solve problems with money
- Estimating and finding exact costs
- Making change
- Explorations: Exploring area, polygons, and geoboard fraction
- Place value
- Place-value tools
- Grouping with Parentheses
- Progress Check

### OCDEL Standards

- 2.0A. 1, 2 Operations and Algebraic Thinking
2. NBT.1, 1a, 1b, Number and operations in base ten
2. NBT. 2, 3, 4 Understand place value
2. NBT., 6, 8 Use place value understanding and properties to add and subtract
2. MD. 8 Measurement and data, work with time and money
2. MD. 9 Measurement and data, Represent and interpret data
- 2.G. 2. Geometry reason with shapes and their attributes

### Common Core Standards

- 2.1.2.A: Demonstrate relationship between numbers and quantities, including place value, one-one correspondence, rote counting, twos, fives, and tens; comparing values of whole numbers up to 500
- 2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects
- 2.1.2.D: apply place value concepts and base ten numeration to order and compare numbers to 500
- 2.1.2.E: apply patterns to represent numbers in various ways (skip counting, repeated addition/subtraction)
- 2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situation
- 2.11.2.A: Order whole numbers, 0 to 500, with least to greatest value.
- 2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

2.5.2.A: Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including penny, nickel, dime, quarter, and dollar), up to 500.

CC.2.1.2.B.1: Use place value concepts to represent amounts of tens and ones and to compare three digit numbers.

CC.2.1.2.B.2: Use place value concepts to read, write, and skip count to 1000.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.4.2.A.3: Solve problems and make change using coins and paper currency with appropriate symbols.

#### Vocabulary

- big cube
- counting up to make change
- cube
- decimal point
- flat
- hundreds, 100s
- long
- one's, 1s
- parentheses
- parenthesis
- place value
- tens, 10s
- ten-thousands, 10,000s
- thousands, 1,000s

#### Assessment(s)

- Daily Assessments pg. 720
- Unit 10 Assessment

#### Duration

15 days

#### Units

Unit 11: Whole Number Operations Revisited

#### Concepts

- Addition Number stories with dollars and cents
- Subtraction number stories with dollars and cents
- The trade-first subtraction algorithm
- Multiples of Equal groups
- Division Number Models
- Multiplication facts
- Products table
- Multiplication/Division Facts Practice
- Progress Check

#### OCDEL Standards

2.0A. 4 Operations and Algebraic Thinking-Work with equal groups of objects to gain foundations for multiplication

2. NBT.1, 1a, Number and Operations in Base Ten Understand place value

2. NBT. 7.9 Use place value understanding and properties to add and subtract

2. MD. 6, 8, 9 Measurement and Data

#### Common Core Standards

**2.5.2.A:** Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts

**2.5.2.B:** Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.1.2.E Apply patterns to represent numbers in various ways (skip counting, repeated addition/subtraction)

2.8.2.E: Use concrete objects, symbols and numbers to represent mathematical situation

2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

2.1.2.B: Represent equivalent forms of the same number through the use of pictures and concrete objects (including penny, nickel, dime, quarter, and dollar), up to 500.

2.3.2.A: Demonstrate that a single object has different attributes that can be measured in multiple ways.

2.4.2.A: Use models and number facts to draw conclusions and explain reasons for conclusions.

2.8.2.D: Use a rule to find a missing element that makes an addition or subtraction number sentence true.

CC.2.1.2.B.3: Use place value understanding and properties of operations to add and subtract within 1000.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.4.2.A.3: Solve problems and make change using coins and paper currency with appropriate symbols.

CC.2.2.2.A.3: Work with equal groups of objects to gain foundations for multiplication.

### Vocabulary

- algorithm
- divided by
- division
- fact family
- factor
- fact power
- for each
- in each
- multiplication diagram
- multiplication/division
- multiplication/division diagram
- multiplication fact
- per
- product
- quotient
- rate multiplication stories
- remainder
- square (of a number)
- trade-first (subtraction)
- turn-around rule for multiplication

### Assessment(s)

- Daily Assessment pg. 794
- Unit 11 Assessment

### Duration

12 days

### • Units

Unit 12: Year End Reviews and Extensions

### Concepts

- Review: The Calendar
- Review: Clock Skills
- Timelines
- Practice Multiplication Facts
- Division for Multiplication
- Graphs: Comparing speeds of animals and people
- The mode of a set of data
- Progress Check

### OCDEL Standards

2.oa. 2 Operations and Algebraic Thinking

2. NBT. 5, 7 Use place value understanding and properties to add and subtract

2.MD. 6, 7, 9, 10 Measurement and Data

### Common Core Standards

2.2.2.B: Add and subtract single and double-digit numbers with and without regrouping, to include problems with money.

2.3.2.A: Demonstrate that a single object has different attributes that can be measured in multiple ways.

2.3.2.B: Use tools to estimate and measure in standard units.

2.3.2.C: Tell time on an analog and digital clock to the nearest minute.

2.4.2.A: Use models and number facts to draw conclusions and explain reasons for conclusions.

2.5.2.A: Develop a plan to analyze a problem, identify the information needed to solve the problem, carry out the plan, check whether an answer makes sense, and explain how the problem was solved in grade appropriate contexts.

2.5.2.B: Use appropriate mathematical vocabulary when explaining how to solve a problem.

2.6.2.B: Organize and display data using pictures, tallies, charts, bar graphs and pictographs.

2.6.2.C: Describe data displayed in a diagram, graph or table.

2.6.2.D: Analyze representations of data and compare the data from two categories.

2.6.2.E: Identify patterns and predict trends based on a comparison to data displayed in a graph.

2.7.2.E: Ask and answer questions about predictions and actual outcomes based on data.

2.8.2.F: Describe, compare, and answer questions about data on classroom graphs and charts.

CC.2.2.2.A.1: Represent and solve problems involving addition and subtraction within 100.

CC.2.2.2.A.3: Work with equal groups of objects to gain foundations for multiplication.

CC.2.4.2.A.2: Tell and write time to the nearest five minutes using both analog and digital clocks.

CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs.

### Vocabulary

- century
- communicate
- decade
- factor
- median

- mode
- product
- range
- timeline
- turn-around rule

Assessment(s)

- Daily Assessment pg 860
- Unit 12 Assessment

Duration

10 days

Mathematics: Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model and mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.