Unit Calendar 2013-2014
Green Brook Township School District
/ Math Curriculum 3 (D) / Grade 3 (District Elementary Curriculum)
Tuesday, August 27, 2013, 2:07PM

Green Brook Township
Public Schools

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Unit:	1 2 3 4	5 6 7 8 9	10 11	12 13	14 15 16 17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33	34 35 36 37	38 39
Place Value, Addition, and Subtraction	▬▬▬									
Money & Time, Data and Probability		▬▬▬								
Multiplication and Division			▬▬▬▬▬▬▬							
Plane & Solid Figures and Patterns					▬▬▬					
Fractions and Decimals							▬▬▬▬			
Length, Weight, Capacity, and Temperature									▬▬▬	
	1 2 3 4 5 6 7 8 9	10 11	12 13	14 15 16 17 18 19 20 21	22 23 24 25	26 27 28 29 30	31 32 33	34 35 36 37	38 39

Last Updated: Monday, September 17, 2012, 9:58AM

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Unit Map 2013-2014
Green Brook Township School District
/ *Math Curriculum 3 (D)* / *Grade 3 (District Elementary Curriculum)*
Tuesday, August 27, 2013, 2:08PM

Unit: Place Value, Addition, and Subtraction (Week 1, 5 Weeks) 🏁 🖼

New Jersey Core Curriculum Standards

CommonCore: Mathematics, CommonCore: Grade 3, Mathematical Practice
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Operations & Algebraic Thinking
3.OA Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations in Base Ten
3.NBT Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Description of Unit	Essential Questions

In this unit, students will deepen their understanding of our place value system through experiences that help them make generalization as they read, write, and understand the value of numbers in this system. They will use base ten materials to model tens, hundreds, and thousands and to investigate different ways to represent a number. Students will apply their knowledge of place value while adding and subtracting larger numbers. They will also investigate the inverse relationship between addition and subtraction and will systematically check the accuracy and reasonableness of their work.

How can we use models to represent mathematical relationships?

- How does place value help us make sense of mathematical concepts?
- How are addition and subtraction related?
- How do addition and subtraction help us solve problems?
- How do mathematical ideas interconnect and build on one another?
- What makes a computational strategy both effective and efficient?
- How do operations affect numbers?
- How can we decide when to use an exact answer and when to use an estimate?

Knowledge	Skills
Students will know that:	Students will be able to:
- the base-ten number system is built on units of ten (ones, tens, hundreds, thousands, etc.) - the place of each digit in a number affects its value - the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 can be used to represent whole numbers - whole numbers can be even or odd, depending on the digit in the ones place - to estimate means to find out about how many or how much - sum is the answer to an addition problem - difference is the answer to a subtraction problem - numbers can be written in different ways - numbers can be compared and ordered - mathematical properties can be used to solve problems - a set of related addition and subtraction number sentences is a fact family - addition and subtraction are inverse operations because they "undo" each other	- identify the value of digits in a number - represent and compare whole numbers and decimals - use a variety of strategies to solve problems - identify a number as being either even or odd - use rounding to estimate the results of whole-number computations - add and subtract whole numbers with and without regrouping - write numbers in standard, word, and expanded form - use mathematical properties to solve problems - use knowledge of fact families to solve computation problems - evaluate the reasonableness of computations

Assessments

Beginning of Year Test
Diagnostic: Benchmark Assessment
   This test assesses current grade level content and provides information on how to guide instruction.

Show What You Know
Diagnostic: Instructional/Assessment Focus
   This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Instructional/Assessment Focus
   This activity assesses prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
   Student responses to lesson quiz, practice workbook, or close/assess problems will provide ongoing data.

Open Ended Problem Solving
Formative: Other written assessments
   Teacher-developed, open-ended problems assess each student's ability to apply mathematical skills and concepts while solving problems.

Chapter Skills Check
Formative: Other written assessments
   Assess acquisition of chapter skills through student responses on each chapter's Extra Practice pages and/or Chapter Review questions.

Chapter Tests
Summative: Written Test
   Multiple choice and open-response tests given at the end of each chapter to assess students' mastery of math concepts and skills.

  🔗 Math Benchmark Test Beg/End Year
  🔗 Math Benchmark Test Beg/End Year

Activities	Activities to Differentiate Instruction
Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity	Projects from "Enrich Workbook" Leveled math concept readers Vocabulary cards/lists

Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities

Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook)

Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook)

NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)

Study guides for assessments
Leveled workbook pages (ELL, re-teach, enrich, and problem solving)
Visual Aids
Manipulatives
Modified tests
HSP Teacher Resource Book
HSP Strategic Intervention (teacher resource book and student pages)
Computer websites
Tiered class/homework assignments
Foldables and graphic organizers

Integrated/Cross-Disciplinary Instruction	Resources
Social Studies - Math concept readers - *Read Your Way* miles record - Timelines - Topography - Reading a map scale - Measuring Language Arts - Math concept readers - Money theme: counting coins, buying and saving - Strategies for reading word problems Science - Math concept readers - Plants unit activities	**HSP Math Grade 3** Teacher's Guide and Student book **HSP Math Practice Workbook** (practice work and spiral review) **HSP Math Teacher's Resource Book**: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day **Manipulatives:** workmats, base-ten blocks, unifix cubes and counters **HSP ThinkCentral**: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line intervention and enrichment (MegaMath)activities; iTools (link attached) **Smart Board technology** **Read Aloud Books** **Math Minutes** **NJ ASK prep booklets** **Teacher Created open-ended Problem Solving sheets** **HSP Teacher Resource Book** **HSP Leveled Math Concept Readers** **Math Benchmark Test** (Link attached)

Think Central Math Resources

 Math Benchmark Test: Beginning/End of Year

Last Updated: Monday, September 17, 2012, 9:49AM

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Unit Map 2013-2014
Green Brook Township School District
/ _Math Curriculum 3 (D)_ / _Grade 3 (District Elementary Curriculum)_
Tuesday, August 27, 2013, 2:08PM

Unit: Money & Time, Data and Probability (Week 6, 5 Weeks) ▦ 🖼

New Jersey Core Curriculum Standards

CommonCore: Mathematics, CommonCore: Grade 3, Mathematical Practice
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Operations & Algebraic Thinking
3.OA Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations in Base Ten
3.NBT Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Measurement & Data

3.MD Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

3.MD Represent and interpret data.

- 3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
- 3.MD.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

Description of Unit	Essential Questions
In this unit, students will develop the lifelong mathematical literacy skill of collecting, organizing, displaying, and interpreting data. They will use existing pictographs and bar graphs to interpret data. They will also create tables and produce graphs from collected data. Students will use arithmetic patterns to count sums of money. Then, they will continue to apply their developing knowledge of the place value system to add, subtract, and compare amounts of money. Students will use probability to measure the likelihood of events and to make predictions. In this unit, students will also read, write, and tell time to the nearest minute on analog and digital clocks.	How does place value help us make sense of mathematical concepts? • How can we use models to represent mathematical relationships? • How can change be best represented mathematically? • How can we use mathematical models to describe physical relationships? • How can the collection, organization, interpretation, and display of data be used to answer questions? • How can probabilities be used to make predictions or draw conclusions? • How do mathematical ideas interconnect and build on one another? • What makes a computational strategy both effective and efficient? • How do operations affect numbers? • How can we decide when to use an exact answer and when to use an estimate?
Knowledge	**Skills**
Students will know that:	Students will be able to:

- money amounts can be added, subtracted, and compared just like whole numbers
- time is the duration of an event
- to write an amount of money, one uses a dollar sign and a decimal point
- bills are worth the amount indicated on each corner in dollars
- a half-dollar is worth 50 cents, a quarter is worth 25 cents, a dime is worth 10 cents, a nickel is worth 5 cents, and a penny is worth 1 cent
- a cent is 1/100 of a dollar
- fractions and decimals can name cents as parts of a dollar
- making a table can help you solve problems
- subtraction and counting on can be used to make change
- analog clocks and digital clocks measure time
- A.M. indicates the hours between midnight and noon
- P.M. indicates the hours between noon and midnight
- elapsed time is the amount of time that passes from the start of an activity to the end of that activity
- hours and minutes are units used to measure time
- data can be collected, analyzed, and displayed in various graphical formats
- tally tables, pictographs, bar graphs, and line plots are graphical formats used to display data
- probability measures the likelihood of events and provides a basis for making predictions

- add, subtract, and compare amounts of money
- write an amount of money using a dollar sign and decimal point
- count a collection of bills and coins
- identify parts of dollars as cents
- make a table to solve problems
- subtract and count on to make change
- tell time to the nearest minute using an analog clock and digital clock
- use a clock to measure elapsed time, including A.M. and P.M.
- use a calendar to determine elapsed time
- collect data on a table
- read and analyze data on pictographs, bar graphs, line plots, and line graphs
- create and display data on pictographs, bar graphs, and line plots
- use ordered pairs to locate points on a grid
- decide if an event is likely, unlikely, certain, or impossible
- find the possible outcomes for events
- conduct probability experiments
- find all possible combinations using a tree diagram
- make an organized list to solve problems

Assessments

Show What You Know
Diagnostic: Instructional/Assessment Focus
   This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Suggested Instructional/Assessment Strategies
   This activity assesses prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
   Student responses to lesson quiz, practice workbook, or close/assess problems will provide ongoing data.

Open Ended Problem Solving
Formative: Other written assessments
  Teacher-developed, open-ended problems assess each student's ability to apply mathematical skills and concepts while solving problems.

Chapter Skills Check
Formative: Other written assessments
  Assess acquisition of chapter skills through student responses on each chapter's Extra Practice pages and/or Chapter Review questions.

Chapter Tests
Summative: Written Test
  Multiple choice and open-response tests given at the end of each chapter to assess students' mastery of math concepts and skills.

Activities	Activities to Differentiate Instruction
Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook) Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook) NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)	Projects from "Enrich Workbook" Leveled math concept readers Vocabulary cards/lists Study guides for assessments Leveled workbook pages (ELL, re-teach, enrich, and problem solving) Visual Aids Manipulatives Modified tests HSP Teacher Resource Book HSP Strategic Intervention (teacher resource book and student pages) Computer websites Tiered class/homework assignments Foldables and graphic organizers
Integrated/Cross-Disciplinary Instruction	**Resources**
Social Studies	**HSP Math Grade 3** Teacher's Guide and Student book

- Math concept readers
- *Read Your Way* miles record
- Timelines
- Topography
- Reading a map scale
- Measuring

Language Arts

- Math concept readers
- Size comparisons
- Strategies for reading word problems

Science

- Math concept readers
- Plants unit activities
- Heat, Light and Sound unit activities

HSP Math Practice Workbook (practice work and spiral review)
HSP Math Teacher's Resource Book: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day
Manipulatives: workmats, base-ten blocks, unifix cubes and counters
HSP ThinkCentral: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line intervention and enrichment (MegaMath)activities; iTools (link attached)
Smart Board technology
Read Aloud Books
Math Minutes
NJ ASK prep booklets
Teacher Created open-ended Problem Solving sheets

 Think Central Math Resources

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Unit Map 2013-2014
Green Brook Township School District
/ *Math Curriculum 3 (D)* / Grade 3 (District Elementary Curriculum)
Tuesday, August 27, 2013, 2:09PM

Green Brook Township
Public Schools

Unit: Multiplication and Division (Week 11, 10 Weeks) 📖 🔖

New Jersey Core Curriculum Standards

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The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Operations & Algebraic Thinking
3.OA Represent and solve problems involving multiplication and division.

- 3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.
- 3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.
- 3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.
- 3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

3.OA Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5. Apply properties of operations as strategies to multiply and divide.
- 3.OA.6. Understand division as an unknown-factor problem.

3.OA Multiply and divide within 100.

- 3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

3.OA Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations in Base Ten
3.NBT Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Measurement & Data
3.MD Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area measurement.
- 3.MD.5a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.
- 3.MD.5b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- 3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).
- 3.MD.7. Relate area to the operations of multiplication and addition.
- 3.MD.7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.
- 3.MD.7b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.
- 3.MD.7c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.
- 3.MD.7d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.

Description of Unit	Essential Questions
In this unit, students will develop fluency with efficient procedures for multiplying and dividing whole numbers, understand why procedures work (on the basis of place	- How does place value help us make sense of mathematical concepts?

value and properties of operations), and use
these procedures to solve problems. Multiplication will be
developed using repeated addition and equal groups,
rectangular arrays, and memorization of facts. Basic fact
strategies will be based on the properties of multiplication,
patterns, and number relationships.
Division will be developed as the inverse of multiplication, just
as subtraction was introduced as the inverse of addition. The
children will solve missing factor problems and will use
multiplication facts to solve division problems presented in a
variety of formats. Algebraic concepts will be developed as
multiplication and division facts and properties are practiced.

- How are multiplication and division related?
- How do multiplication and division help me solve
  problems?
- How do mathematical ideas interconnect and build on one
  another?
- What makes a computational strategy both effective and
  efficient?
- How do operations affect numbers?
- How can we use models to represent mathematical
  relationships?

Knowledge	Skills
Students will know that: • multiplication is the process of finding the total number of items in equal-sized groups • an array is an arrangement of objects in rows and columns • a factor is a number that is multiplied by another number to find a product • mathematical properties can be used to solve problems • a multiple is the product of a given whole number and another whole number • a variable is a letter or symbol that stands for a number or numbers • division tells how many groups or how many in each group • division is the inverse operation of multiplication • a quotient is the number, not including the remainder, that results from division • a set of related multiplication and division number sentences is a fact family • an equation is a number sentence that uses the equal sign to show that two amounts are equal • a remainder is the amount left over when a number cannot be divided evenly	Students will be able to: • relate addition to multiplication • use and create arrays to show multiplication • multiply with the factors 2-10 • recognize and use patterns in multiplication • use the identity property and the zero property to multiply by 1 and 0 • use arrays or multiplication tables to find missing factors • use manipulatives and draw models (including pictures, number lines, and arrays) to solve problems • find the multiples for the factors 2-10 • multiply one-digit whole numbers by multiples of ten in the range of 10-90 • write story problems involving equal groups • solve and write equations that use variables • use and create models to understand division • relate subtraction to division • understand division as an unknown-factor problem • use arrays and fact families to find products and quotients • fluently multiply and divide within 100 • divide by digits 2-9 • know from memory all products of two one-digit numbers • use multiplication and division within 100 to solve word problems

- solve two-step word problems using the four operations
- determine the unknown whole number in a multiplication or division equation
- find the rule shown on a function table
- use basic facts to multiply and divide bigger numbers
- estimate to find products and quotients
- solve division problems that include remainders

Assessments

Show What You Know
Diagnostic: Instructional/Assessment Focus
  This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Instructional/Assessment Focus
  This activity assess prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
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Formative: Other written assessments
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Chapter Tests
Summative: Written Test
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Activities	Activities to Differentiate Instruction
	Projects from "Enrich Workbook"

Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity

Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities

Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook)

Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook)

NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)

Leveled math concept readers
Vocabulary cards/lists
Provide advanced fact memorization challenges for multiplication and division
Provide modified fact memorization challenge sheets
Study guides for assessments
Leveled workbook pages (ELL, re-teach, enrich, and problem solving)
Visual Aids
Manipulatives
Modified tests
HSP Teacher Resource Book
HSP Strategic Intervention (teacher resource book and student pages)
Computer websites
Tiered class/homework assignments
Foldables and graphic organizers

Integrated/Cross-Disciplinary Instruction	Resources
Social Studies • Math concept readers • *Read Your Way* miles record • Timelines • Line graphs • Reading a map scale • Measuring • Communities trade and barter Language Arts • Math concept readers • Using larger numbers • Comparing numbers • Number sequencing and time lines • Strategies for reading word problems Science	**HSP Math Grade 3** Teacher's Guide and Student book **HSP Math Practice Workbook** (practice work and spiral review) **HSP Math Teacher's Resource Book**: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day **Manipulatives**: workmats, base-ten blocks, unifix cubes and counters **HSP ThinkCentral**: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line intervention and enrichment (MegaMath)activities; iTools (link attached) **Smart Board technology** **Read Aloud Books** **Math Minutes** **NJ ASK prep booklets** **Teacher Created open-ended Problem Solving sheets** **HSP Teacher Resource Book**

HSP Leveled Math Concept Readers

- Math concept readers
- Heat, light and sound unit activities
- Properties of matter unit activities

 Think Central Math Resources

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Unit Map 2013-2014
Green Brook Township School District
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Unit: Plane & Solid Figures and Patterns (Week 21, 5 Weeks) 🖽 📄

New Jersey Core Curriculum Standards

CommonCore: Mathematics, CommonCore: Grade 3, Mathematical Practice
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Operations & Algebraic Thinking
3.OA Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- 3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Measurement & Data
3.MD Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area measurement.
- 3.MD.5a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.
- 3.MD.5b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- 3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

3.MD Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

CommonCore: Mathematics, CommonCore: Grade 3, Geometry
3.G Reason with shapes and their attributes.

- 3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

Description of Unit	Essential Questions
In this unit, students will develop spatial sense as they learn about shapes and begin to categorize and classify the relationships among shapes. Formal geometric vocabulary will be introduced as a means of mathematically describing plane figures in terms of size and angles and solid figures in terms of faces, edges, and vertices. They will use this vocabulary to classify and compare two-dimensional and three-dimensional figures according to their geometric attributes. Patterns will be further explored, identified, described, extended, and generalized with words and symbols.	- How can spatial relationships be described by use of geometric language? - How do geometric relationships help to solve problems? - How can patterns, relations, and functions be used as tools to describe and explain real-life situations? - How can we use mathematical models to describe physical relationships? - How do mathematical ideas interconnect and build on one another? - How can attributes be used to classify objects? - How do operations affect numbers?

Knowledge	Skills
Students will know that: - a quadrilateral is a polygon with four sides - rhombuses, rectangles, and squares are examples of quadrilaterals - shapes in different categories may share attributes - categories of shapes can be defined by their attributes - area is the measurement of space inside a plane figure - perimeter is the distance around a figure - volume is the amount of space a solid figure takes up - area and perimeter are attributes of plane figures	Students will be able to: - identify, compare and analyze two- and three-dimensional shapes - explain how points, lines, line segments, and angles are related - identify and classify lines and plane figures - identify and classify types of triangles - identify the parts of a circle - use a Venn diagram to categorize plane shapes - combine plane shapes to make new figures

- a polygon is a closed plane figure with straight sides that are line segments
- polygons are identified by the number of sides and angles
- triangles are identified by the length of their sides and types of angles
- lines are categorized by how they interact with other lines
- angles are measured in degrees
- a solid figure is three-dimensional
- a face is the flat surface of a solid figure
- an edge is the line segment formed where two faces meet
- a vertex is a point where three or more edges meet
- there are different types of patterns that can be formed in multiple ways

- identify similar, congruent, and symmetrical figures
- determine a figure's line(s) of symmetry
- use common language to describe the location and movement of geometric shapes
- identify a solid figure from a net
- create complex solid figures

Assessments

Show What You Know
Diagnostic: Instructional/Assessment Focus
   This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Instructional/Assessment Focus
   This activity assesses prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
   Student responses to lesson quiz, practice workbook, or close/assess problems will provide ongoing data.

Open Ended Problem Solving
Formative: Other written assessments
   Teacher-developed, open-ended problems assess each student's ability to apply mathematical skills and concepts while solving problems.

Chapter Skills Check
Formative: Other written assessments
   Assess acquisition of chapter skills through student responses on each chapter's Extra Practice pages and/or Chapter Review questions.

Chapter Test
Summative: Written Test

Mutliple choice and open-response tests given at the end of each chapter to assess students' mastery of math concepts and skills.

Activities	Activities to Differentiate Instruction
Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook) Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook) NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)	Projects from "Enrich Workbook" Alien project Leveled math concept readers Vocabulary cards/lists Study guides for assessments Leveled workbook pages (ELL, re-teach, enrich, and problem solving) Visual Aids Manipulatives Modified tests HSP Teacher Resource Book HSP Strategic Intervention (teacher resource book and student pages) Computer websites Tiered class/homework assignments Foldables and graphic organizers
Integrated/Cross-Disciplinary Instruction	**Resources**
Social Studies - Math concept readers - *Read Your Way* miles record - Timelines - Topography - Reading a map scale on an inset map - Measuring Language Arts - Math concept readers	**HSP Math Grade 3** Teacher's Guide and Student book **HSP Math Practice Workbook** (practice work and spiral review) **HSP Math Teacher's Resource Book**: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day **Manipulatives**: workmats, base-ten blocks, unifix cubes and counters **HSP ThinkCentral**: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line

- Chronological sequence of events
- Calendar work
- Strategies for reading word problems

Science

- Math concept readers
- Properties of matter unit activities

intervention and enrichment (MegaMath)activities; iTools (link attached)
Smart Board technology
Read Aloud Books
Math Minutes
NJ ASK prep booklets
Teacher Created open-ended Problem Solving sheets
HSP Teacher Resource Book
HSP Leveled Math Concept Readers

 Think Central Math Resources

Last Updated: Monday, September 17, 2012, 9:52AM

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Unit Map 2013-2014
Green Brook Township School District
/ Math Curriculum 3 (D) / Grade 3 (District Elementary Curriculum)
Tuesday, August 27, 2013, 2:10PM

Green Brook Township
Public Schools

Unit: Fractions and Decimals (Week 26, 8 Weeks) 🎴 📇

New Jersey Core Curriculum Standards

CommonCore: Mathematics, CommonCore: Grade 3, Mathematical Practice
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations—Fractions
3.NF Develop understanding of fractions as numbers.

- 3.NF.1. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.
- 3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- 3.NF.2a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line.
- 3.NF.2b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
- 3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
- 3.NF.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- 3.NF.3b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- 3.NF.3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

- 3.NF.3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

CommonCore: Mathematics, CommonCore: Grade 3, Geometry
3.G Reason with shapes and their attributes.

- 3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

Description of Unit	Essential Questions
In this unit, students will experience concrete and real-life applications with fractions and decimals before focusing on how to represent them symbolically. They will recognize the fractional language we use in our daily lives to describe parts of a whole or parts of a collection of things. They will make connections between fractions and other mathematical strands and use a variety of concrete materials to give meaning to fractional symbols. These concrete experiences will help them to make the following generalizations: -a fraction describes the division of a whole into equal parts -the same fractional quantity can be represented many different ways -equal parts can look different but must be equal in size to be represented as a fraction -the more equal parts, the smaller each share will be -equivalent fractions name the same amount	- How does place value help us make sense of mathematical concepts? - How do mathematical ideas interconnect and build on one another? - How can we decide when to use an exact answer and when to use an estimate? - How do operations affect numbers? - How can we use models to represent mathematical relationships? - How can measurements be used to solve problems? - How can change be represented mathematically?

Knowledge	Skills
Students will know that: - a fraction is a number that names part of a whole or part of a group - the numerator is the part of a fraction above the line which tells how many parts are being counted - the denominator is the part of a fraction below the line which tells how many equal parts there are in the whole or in the group	Students will be able to: - rewrite and model fractional parts of a whole - rewrite and model fractional parts of a group - model and write equivalent fractions - compare and order fractions - make models and draw diagrams to solve problems - identify, read, and write mixed numbers - add and subtract like fractions - model and write fractions and decimals in tenths

- equivalent fractions are two or more fractions that are the same size or the same point on a number line
- fractions can be compared by modeling or reasoning about their size
- fractions can only be compared when the two fractions refer to the same whole
- a mixed number is a number represented by a whole number and a fraction
- fractions, whole numbers, and mixed numbers can be represented on a number line
- the more equal parts, the smaller each share will be
- equal parts can look different but must be equal in size to be represented as a fraction
- a decimal, a number with one or more digits to the right of the decimal point, is another way to represent a fractional part of a whole
- tenths are one of ten equal parts and hundredths are one of 100 equal parts
- money is represented in decimal form

- model and write fractions and decimals in hundredths
- read and write decimals greater than one
- relate fractions, decimals, and money

Assessments

Show What You Know
Diagnostic: Instructional/Assessment Focus
   This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Instructional/Assessment Focus
   This activity assesses prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
   Student responses to lesson quiz, practice workbook, or close/assess problems will provide ongoing data.

Open Ended Problem Solving
Formative: Other written assessments
   Teacher-developed, open-ended problems assess each student's ability to apply mathematical skills and concepts while solving problems.

Chapter Skills Check
Formative: Other written assessments

Assess acquisition of chapter skills through student responses on each chapter's Extra Practice pages and/or Chapter Review questions.

Chapter Tests
Summative: Written Test
Multiple choice and open-response tests given at the end of each chapter to assess students' mastery of math concepts and skills.

Activities	Activities to Differentiate Instruction
Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook) Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook) NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)	Projects from "Enrich Workbook" Leveled math concept readers Vocabulary cards/lists Study guides for assessments Leveled workbook pages (ELL, re-teach, enrich, and problem solving) Visual Aids Manipulatives Modified tests HSP Teacher Resource Book HSP Strategic Intervention (teacher resource book and student pages) Computer websites Tiered class/homework assignments Foldables and graphic organizers
Integrated/Cross-Disciplinary Instruction	**Resources**
Social Studies • Math concept readers • *Read Your Way* miles record • Timelines • Topography • Reading a map scale	**HSP Math Grade 3** Teacher's Guide and Student book **HSP Math Practice Workbook** (practice work and spiral review) **HSP Math Teacher's Resource Book**: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day

- Reading bar graphs
- Money and economics: income, budget, interest, opportunity cost, flow chart, supply and demand

Language Arts

- Math concept readers
- Reading a recipe
- Poetry: meter and rhythm
- Strategies for reading word problems
- Problem Project: World Record Line Plot

Science

- Math concept readers
- Properties of matter unit activities
- Astronomy

Manipulatives: workmats, base-ten blocks, unifix cubes and counters
HSP ThinkCentral: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line intervention and enrichment (MegaMath)activities; iTools (link attached)
Smart Board technology
Read Aloud Books
Math Minutes
NJ ASK prep booklets
Teacher Created open-ended Problem Solving sheets
HSP Teacher Resource Book
HSP Leveled Math Concept Readers

 Think Central Math Resources

 Problem Project: World Record Line Plot

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Unit Map 2013-2014
Green Brook Township School District
/ *Math Curriculum 3 (D)* / *Grade 3 (District Elementary Curriculum)*
Tuesday, August 27, 2013, 2:10PM

Green Brook Township Public Schools

Unit: Length, Weight, Capacity, and Temperature (Week 34, 6 Weeks) 🏓 🖼

New Jersey Core Curriculum Standards

CommonCore: Mathematics, CommonCore: Grade 3, Mathematical Practice
The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

- 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 with 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.

CommonCore: Mathematics, CommonCore: Grade 3, Operations & Algebraic Thinking
3.OA Represent and solve problems involving multiplication and division.

- 3.OA.1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.
- 3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.
- 3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.
- 3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

3.OA Understand properties of multiplication and the relationship between multiplication and division.

- 3.OA.5. Apply properties of operations as strategies to multiply and divide.
- 3.OA.6. Understand division as an unknown-factor problem.

3.OA Multiply and divide within 100.

- 3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations in Base Ten
3.NBT Use place value understanding and properties of operations to perform multi-digit arithmetic.

- 3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.
- 3.NBT.2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

CommonCore: Mathematics, CommonCore: Grade 3, Number & Operations—Fractions
3.NF Develop understanding of fractions as numbers.

- 3.NF.1. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.
- 3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- 3.NF.2a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line.
- 3.NF.3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.

CommonCore: Mathematics, CommonCore: Grade 3, Measurement & Data
3.MD Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

- 3.MD.1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
- 3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

3.MD Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

- 3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area measurement.
- 3.MD.5a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.
- 3.MD.5b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.
- 3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).
- 3.MD.7. Relate area to the operations of multiplication and addition.

3.MD Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- 3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Description of Unit	Essential Questions
In this unit, the children will develop a sense of measurement while exploring length, weight/mass, capacity/volume, and temperature. They will estimate and measure length, weight/mass, capacity/volume, and temperature using customary and metric units. They will practice developing computation skills as they make conversions from one unit of measurement to another. Students will solve problems that involve the four operations and measurement.	- How do mathematical ideas interconnect and build on one another? - What makes a computational strategy both effective and efficient? - How do operations affect numbers? - How can we use models to represent physical relationships? - How can measurements be used to solve problems? - How can spatial relationships be described by use of geometric language?

Knowledge	Skills
Students will know that: - length is the measure of something from end to end - capacity is the amount a container can hold - volume is the amount of space a solid figure encompasses - weight or mass is how heavy an object is - mass is the amount of matter in an object - temperature can be measured in degrees Fahrenheit or Celsius - measurements can be made using customary or metric units	Students will be able to: - identify and use customary units of length - estimate and measure length - estimate and measure capacity - estimate and measure weight - estimate and measure volume - estimate and measure temperature - solve problems involving customary and metric units of measurement

<u>Assessments</u>

Show What You Know

Diagnostic: Instructional/Assessment Focus
   This prerequisite skills test assesses prior knowledge and determines the need for strategic intervention.

Problem of the Day
Diagnostic: Instructional/Assessment Focus
   This activity assesses prior knowledge.

Daily Skills Check
Formative: Instructional/Assessment Focus
   Student responses to lesson quiz, practice workbook, or close/assess problems will provide ongoing data.

Open Ended Problem Solving
Formative: Other written assessments
   Teacher-developed, open-ended problems assess each student's ability to apply mathematical skills and concepts while solving problems.

Chapter Skills Check
Formative: Other written assessments
   Assess aquisition of chapter skills through student responses on each chapter's Extra Practice pages and/or Chapter Review questions.

Chapter Tests
Summative: Written Test
   Multiple choice and open-response tests given at the end of each chapter to assess students' mastery of math concepts and skills.

End of Year Test
Summative: Benchmark Assessment
   This test assesses student mastery of grade level content.

Activities	Activities to Differentiate Instruction
Chapter Introductions: Use "Show What You Know" to assess prior knowledge, introduce the "Big Idea" and vocabulary, "Investigate" activity Math Journal work: Vocabulary and definitions, problem of the day, Quick Review, closure and assessment activities Concept Development Activities: working with manipulatives, quick assess with communicators, interactive SMART Board work, learning centers, leveled	Projects from "Enrich Workbook" Leveled math concept readers Vocabulary cards/lists Study guides for assessments Leveled workbook pages (ELL, re-teach, enrich, and problem solving) Visual Aids Manipulatives Modified tests HSP Teacher Resource Book

practice pages, open-ended problem solving sheets, Math Minutes, math fact practice sheets, guided practice problems (from textbook)

Assessment Activities: Leveled practice pages, communicators, math journal, ticket to leave, open-ended problem solving sheets, timed math fact quizzes, independent practice problems (from textbook)

NJASK Preparation: NJASK prep booklets, open-ended problem solving, test prep practice problems (from textbook)

HSP Strategic Intervention (teacher resource book and student pages)
Computer websites
Tiered class/homework assignments
Foldables and graphic organizers

Integrated/Cross-Disciplinary Instruction	Resources

Social Studies
 	
- Math concept readers
- *Read Your Way* miles record
- Timelines
- Reading a map scale
- Understanding lines of latitude and longitude
 	
Language Arts
 	
- Math concept readers
- Chronological order and sequencing
- Measuring with large numbers
- Distance and perspective
- Timelines
- Strategies for reading word problems
 	
Science
 	
- Math concept readers
- Astronomy unit activities
- Using larger numbers
	HSP Math Grade 3 Teacher's Guide and Student book
	HSP Math Practice Workbook (practice work and spiral review)
	HSP Math Teacher's Resource Book: masters for enrichment, problem solving, math language support ELL, re-teach activities; problem of the day
	Manipulatives: workmats, base-ten blocks, unifix cubes and counters
	HSP ThinkCentral: student text; teacher's guide; enrichment, re-teach, problem solving and practice worksheets; on-line intervention and enrichment (MegaMath)activities; iTools (link attached)
	Smart Board technology
	Read Aloud Books
	Math Minutes
	NJ ASK prep booklets
	Teacher Created open-ended Problem Solving sheets
	HSP Teacher Resource Book
	HSP Leveled Math Concept Readers
	Math Benchmark Test (Link attached)
	
	  Math Benchmark Test: Beginning/End of Year
	  Think Central Math Resources

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