

SOUTH HARRISON TOWNSHIP ELEMENTARY SCHOOL DISTRICT



Committed to Excellence

Course Name: Mathematics	Grade Level(s): 2
BOE Adoption Date: October 2017	Revision Date(s):

ABSTRACT

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

1. Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).
2. Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.
3. Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.

4. Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

TABLE OF CONTENTS

Mission Statement	Page 3
Curriculum and Instruction Goals	Page 3
Philosophy of Shared Curriculum Service with South Harrison Township Elementary	Page 3
How to Read this Document	Page 4
Terms to Know	Pages 4-6
Pacing Guide	Pages 7-9
Curriculum Units	Pages 11-33

Mission Statement

The primary goal of the South Harrison Township Elementary School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.

Guiding this mission will be Federal mandates, including the Every Student Succeeds Act (ESSA), the New Jersey Student Learning Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring Home and School Association (HSA) and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn.

Curriculum and Instruction Goals

Goal(s):

1. To ensure students are college and career ready upon graduation
2. To vertically and horizontally align curriculum K-12 to ensure successful transition of students at each grade level
3. To identify individual student strengths and weaknesses utilizing various assessment measures (formative, summative, alternative, etc.) so as to differentiate instruction while meeting the rigor of the applicable content standards
4. To improve student achievement as assessed through multiple measures including, but not limited to, state testing, local assessments, and intermediate benchmarking

Philosophy of the Shared Curriculum Service with Kingsway Regional School District

Together in its partnership with the South Harrison Township Elementary School District, the Kingsway Curriculum & Instruction Department is committed to providing all students grades K-12 with an engaging and quality curricular experience that aligns with the New Jersey Student Learning Standards (NJ SLS) for mathematics and English-Language Arts as well as the New Jersey Student Learning Standards (NJ SLS) for all other core disciplines. It is the goal of this shared service to provide students with curricular and educational experiences that allows them to succeed as they move on to the middle and high school level. Through this shared service, both horizontal and vertical alignment is stressed at and within each grade level with the aim of developing life-long learners who are college and career ready upon graduation from high school. Additionally, classroom instruction will be designed to meet the unique learning desires of all children and will be differentiated according to the needs of each learner. Whether through added support or enrichment activities, it is the role of the educator in the classroom to ensure students are reaching their highest level of social, emotional, and academic growth each school year. A combination of summative, formative,

and performance-based assessments will be used to assess students' understanding and acquisition of necessary concepts and skills. Group work, projects, and a variety of co-curricular activities will make mathematics more meaningful and aid in the understanding of its application across all disciplines as well as in life.

How to Read this Document

This document contains a pacing guide and curriculum units. The pacing guides serve to deliver an estimated timeframe as to when noted skills and topics will be taught. The pacing of each course, however, will differ slightly depending upon the unique needs of each class. The curriculum units contain more detailed information as to the specific skills and concepts that are introduced as well as how students will be assessed. The terms and definitions below will assist the reader in better understanding the sections and components of this curriculum document.

Terms to Know

1. **Accommodation(s):** The term "accommodation" may be used to describe an *alteration* of environment, curriculum format, or equipment that allows an individual with a disability to gain access to content and/or complete assigned tasks. They allow students with disabilities to pursue a regular course of study. The term accommodation is often used interchangeable with the term modification. However, it is important to remember that modifications change or modify the intended learning goal while accommodations result in the same learning goal being expected but with added assistance in that achievement. Since accommodations do not alter what is being taught, instructors should be able to implement the same grading scale for students with disabilities as they do for students without disabilities.
2. **Differentiated Instruction:** Differentiation of instruction relies on the idea that instructional approaches should be tailored to each individual student's learning needs. It provides students an array of options during the learning process that allows them make sense of ideas as it relates to them. The integration of differentiated instructional techniques is a curriculum design approach to increase flexibility in teaching and decrease the barriers that frequently limit student access to materials and learning in classrooms. <http://www.udlcenter.org/aboutudl>
3. **Enduring Understanding:** Enduring understandings (aka big ideas) are statements of understanding that articulate deep conceptual understandings at the heart of each content area. Enduring understandings are noted in the alongside essential questions within each unit in this document. <http://www.ascd.org>

4. **Essential Question:** These are questions whose purpose is to stimulate thought, to provoke inquiry, and to spark more questions. They extend beyond a single lesson or unit. Essential questions are noted in the beginning of each unit in this document. <http://www.ascd.org>
5. **Formative Assessment(s):** Formative assessments monitor student learning to provide ongoing feedback that can be used by (1) instructors to improve teaching and (2) by students to improve their learning. Formative assessments help identify students' strengths and weaknesses and address problems immediately.
6. **Learning Activity(s):** Learning activities are those activities that take place in the classroom for which the teacher facilitates and the students participate in to ensure active engagement in the learning process. (Robert J. Marzano, *The Art and Science of Teaching*)
7. **Learning Assignment(s):** Learning assignments are those activities that take place independently by the student inside the classroom or outside the classroom (i.e. homework) to extend concepts and skills within a lesson. <http://www.marzanocenter.com>
8. **Learning Goal(s):** Learning goals are broad statements that note what students “should know” and/or “be able to do” as they progress through a unit. Learning goals correlate specifically to the NJSL (New Jersey Student Learning Standards) are noted within each unit.
9. **Learning Objective(s):** Learning objectives are more specific skills and concepts that students must achieve as they progress towards the broader learning goal. These are included within each unit and are assessed frequently by the teacher to ensure students are progressing appropriately. <http://www.marzanoresearch.com>
10. **Model Assessment:** Within the model curriculum, model assessments are provided that included assessments that allow for measuring student proficiency of those target skills as the year of instruction progresses. <http://www.state.nj.us/education/modelcurriculum/>
11. **Model Curriculum:** The model curriculum has been provided by the state of New Jersey to provide a “model” for which districts can properly implement the NJSL (New Jersey Student Learning Standards) by providing an example from which to work and/or a product for implementation.

12. **Modification(s):** The term "modification" may be used to describe a *change* in the curriculum. Modifications are typically made for students with disabilities who are unable to comprehend all of the content an instructor is teaching. The term modification is often used interchangeable with the term accommodations. However, it is important to remember that modifications change or modify the intended learning goal while accommodations result in the same learning goal being expected but with assistance in that achievement.
13. **Performance Assessment(s):** (aka alternative or authentic assessments) Performance assessments are a form of assessment that requires students to perform tasks that generate a more authentic evaluation of a student's knowledge, skills, and abilities. Performance assessments stress the application of knowledge and extend beyond traditional assessments (i.e. multiple-choice question, matching, true & false, etc.).
14. **Standard(s):** Academic standards, from which the curriculum is built, are statements that of what students "should know" or "be able to do" upon completion of a grade-level or course of study. Educational standards help teachers ensure their students have the skills and knowledge they need to be successful by providing clear goals for student learning. <http://www.state.nj.us/njded/cccs/>
- **State:** The New Jersey Student Learning Standards (NJSLS) include Preschool Teaching and Learning Standards as well as K-12 standards for: *Visual and Performing Arts; Comprehensive Health and Physical Education; Science; Social Studies; World Languages; Technology; and 21st-Century Life and Careers.*
15. **Summative Assessment(s):** Summative assessments evaluate student learning at the end of an instructional time period by comparing it against some standard or benchmark. Information from summative assessments can be used formatively when students or faculty use it to guide their efforts and activities in subsequent courses.
16. **21st Century Skill(s):** These skills emphasis the growing need to focus on those skills that prepare students successfully by focusing on core subjects and 21st century themes; learning and innovation skills; information, media and technology skills; and life and career skills. These concepts are embedded in each unit of the curriculum. <http://www.p21.org/our-work/p21-framework>

Proficiencies and Pacing:

Unit Title	Duration/Month(s)	Related Standards	Learning Goals	Topics and Skills
Unit 1 Add and Subtract within 100 and Understand Place Value to 1000	8 weeks September-October	2.OA.A.1 2.OA.B.2 2.NBT.A.1 2.NBT.A.2 2.NBT.A.3 2.NBT.A.4 2.NBT.B.8	<p><i>Student will understand...</i></p> <ul style="list-style-type: none"> • How to use addition and subtraction within 20 to solve one and two-step word problems (8 weeks) • How to skip count by 5's and 10's. (4 weeks) • Expanded notation (4 weeks) • How to read and write numbers up to 1,000. (3 weeks) • How to fluently add and subtract within 10. (8 weeks) • How symbols can be used to compare numbers (3 weeks) • How to add and subtract hundreds and tens mentally. (3 weeks) 	<p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Use strategies to add and subtract to solve one and two-step word problems (i.e. use drawings and equations, count on, put together, take from, and take apart) • Represent 3- and 4-digit numbers using hundreds, tens, and ones • Implement appropriate strategies to assist them in adding and subtracting numbers within 1,000 • Skip count by 5's, 10's, and 100's • Independently and fluently add and subtract numbers within 10. • Mentally add and subtract 10 or 100 from a numbers between 100 and 900 • Compare 3-digit numbers using symbols
Unit 2 Place Value Strategies for Addition and Subtraction	8 weeks November- January	2.OA.A.1 2.OA.B.2 2.OA.C.3 2.OA.C.4 2.G.A.2 2.NBT.B.5 2.NBT.B.6 2.NBT.B.7 2.NBT.B.9 2.NBT.A.2	<p><i>Students will understand:</i></p> <ul style="list-style-type: none"> • That equations can be used to express an even number as a sum of two equal addends (8 weeks) • How arrays can be used to represent an equation expressing the total as a sum of equal addends. (3 weeks) 	<p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> • Determine whether groups of objects contain an even or add number of objects. • Use repeated addition to find a total in an array • Write and equation to express repeated addition represented by an array. • Partition a rectangle into rows and

			<ul style="list-style-type: none"> • Different strategies can be used to add and subtract within 50. (8 weeks) • Place value and properties of operations can be used to add and subtract up to 4-digit numbers. (3 weeks) • How to use drawings to explain why place value and properties of operations work. (3 weeks) 	<p>columns of equal sized squares.</p> <ul style="list-style-type: none"> • Use a variety of strategies to add and subtract within 50 • Add up to 4-digit numbers using place value and properties of operations. • Use drawings to represents addition and subtraction within 1,000.
Unit 3 Measurement	8 weeks February-March	2.MD.A.1 2.MD.A.3 2.MD.A.2 2.MD.A.4 2.MD.B.5 2.MD.B.6 2.MD.C.7 2.NBT.A.2 2.NBT.B.5	<p>Students will understand:</p> <ul style="list-style-type: none"> • Appropriate tools to estimate and measure lengths of objects. (8 weeks) • How different units of measurement can be used to measure the length of an object. (8 weeks) • How to solve real-world problems involving adding and subtracting length. (8 weeks) • That a symbol can be used to represent an unknown number in an equation. (4 weeks) • How a number line can be used to represent sums and differences of whole numbers. (3 weeks) • That time can be 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Estimate lengths of objects • Measure lengths of objects using rulers, yardsticks, meters, and measuring tapes. • Compare lengths of objects • Use a number sentence with a symbol for the unknown to represent a problem. • Equally space points on a number line to represent whole numbers • Use a number line to represent sums and differences within 100. • Tell and write time on analog and digital clocks to the nearest 5 minutes. • Select and use a strategy to add and subtract within 100.

			<p>represented in different ways. (4 weeks)</p> <ul style="list-style-type: none"> • How to choose an appropriate strategy to add and subtract within 100. (8 weeks) 	
<p>Unit 4 Reason with Shapes and Represent Data</p>	<p>8 weeks April-May</p>	<p>2.G.A.1 2.G.A.3 2.MD.C.8 2.MD.D.9 2.MD.D.10 2.OA.B.2 2.NBT.B.5</p>	<p>Students will understand:</p> <ul style="list-style-type: none"> • That shapes have attributes that can be used to identify them. (4weeks) • How “halves,” “thirds,” half of,” etc. can be used to describe equal shares of partitioned shapes. (3 weeks) • How to solve and represent word problems involving money (3 weeks) • How to represent and read data presented on a line plot, picture graph, or bar graph. (4 weeks) • How mental strategies can be used to increase addition and subtraction fluency to 20. (5 weeks) • That place value, properties of operations and the relationship between addition and subtraction can be used to fluently add and subtract within 100. (6 weeks) 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Draw shapes given specific attributes • Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. • Partitions shapes into 2,3, and 4 equal shares, and describe each share. • Solve word problems involving dollar bills and coins • Use tools to measure objects, and represent that data on a line plot. • Draw a picture graph and bar graph to represent data. • Fluently add and subtract within 20 using mental strategies • Fluently add and subtract within 100 using place value, properties of operations and the relationship between addition and subtraction

Unit 1: Add and Subtract within 100 and Understand Place Value to 1000	Recommended Duration: 8 weeks (September-October)
---	--

Unit Description:

Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How does the position of a digit in a number affect its value? • In what ways can numbers be composed and decomposed? • How are place value patterns repeated in numbers? 	<ul style="list-style-type: none"> • Understanding number relationships aids in computation and conceptualizing numbers. • Proficiency with basic facts aids estimation and computation of larger and smaller numbers.

Relevant Standards	Learning Goals	Learning Objectives
<p>Content Standards: Primary or Power</p> <p>2.OA.A.1 2.OA.B.2 2.NBT.A.1 2.NBT.A.2 2.NBT.A.3 2.NBT.A.4 2.NBT.B.8</p>	<p>Student will understand...</p> <ul style="list-style-type: none"> • How to use addition and subtraction within 20 to solve one and two-step word problems • How to skip count by 5's and 10's. • Expanded notation • How to read and write numbers up to 1,000. • How to fluently add and subtract within 10. • How symbols can be used to compare numbers • How to add and subtract hundreds and tens mentally. 	<p>Students will be able to...</p> <ul style="list-style-type: none"> • Use strategies to add and subtract to solve one and two-step word problems (i.e. use drawings and equations, count on, put together, take from, and take apart) • Represent 3- and 4-digit numbers using hundreds, tens, and ones • Implement appropriate strategies to assist them in adding and subtracting numbers within 1,000 • Skip count by 5's, 10's, and 100's • Independently and fluently add and subtract numbers within 10. • Mentally add and subtract 10 or 100 from a numbers between 100 and 900 • Compare 3-digit numbers using symbols

Formative Assessments	Summative Assessments	Performance Assessments	Major Activities/ Assignments (required)
<ul style="list-style-type: none"> • One to one conferencing and anecdotal notes • Rubrics • Pre/Post RTI benchmark assessments • Differentiated Facts Centers • Essential Questions • Mental Math and Reflexes • Math Message • Teaching the Lesson (Vocabulary Infused) • Ongoing Learning and Practice • Differentiation Options • Math Boxes • Games • Reflection - Essential Questions revisited (Exit Slip, Journal, Orally, etc) 	<ul style="list-style-type: none"> • <i>My Math</i> : Multiple Choice or Performance Assessments • Common Summative Assessments 	<ul style="list-style-type: none"> • Math Message • Oral and Slate Assessments • Essential Questions • Class Directions/ Discussion/ Questions 	<ul style="list-style-type: none"> • Unit 1: Math Common Summative Assessment • NJ SLS 2.OA.A.1 CF: Pencil and a Sticker • NJ SLS 2.OA.B.2 CF: Building Towards Fluency • NJ SLS 2.MBT.A1 CF: Making 124 CF: Largest Number Game • NJ SLS 2.MBT.A.2 • NJ SLS 2.MBT.A.3 CF: Looking at Numbers Every Which Way • NJ SLS 2.MBT.A.4 CF: Ordering 3-digit Numbers • NJ SLS 2.MBT.B.8 CF: Choral Counting

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to EXPRESS their understanding and comprehension of the content/skills taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Modify assignments as needed (e.g., vary length, limit items) • Shorten assignments • Increase the amount of item allowed to complete assignments and tests • Limit amount of work required or length of 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten Blocks • Native language support • Fact Family Triangles • Choice questions 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to EXPRESS their understanding and comprehension of the content/skills taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> tests Hands-on-projects 	<ul style="list-style-type: none"> L1 text and/or support Illustrations/diagrams/drawings Place Value Chart Small group 		

Instructional Strategies (refer to Robert Marzano’s 41 Elements)

- Manipulatives, KWL, academic games,
- Mathematic Workstations,
- Read Aloud
- Model think aloud comprehension strategies
- Modeling
- Choice Menus
- Math logs/journals

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Read class materials orally • Provide small group instruction • Provide study outlines/guides • Prior notice of tests • Test study guide 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten Blocks • Native language support • Fact Family Triangles • Choice questions • L1 text and/or support • Teacher Modeling • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
	<ul style="list-style-type: none"> Place Value Chart Small group 		

Unit Vocabulary

Essential:

Count on, put together, take from, take apart, equation, represent, mental strategies, hundreds, tens, ones, count by, expanded form, compare, less than, greater than, equal to

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
	<ul style="list-style-type: none"> Students may use computers for reinforcement of skills during centers Interactive whiteboards may be used to display problems and/or interactive manipulatives 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and</p>	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> Students are encouraged to think

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
		inventiveness in work <ul style="list-style-type: none"> Students are encouraged to think critically and creatively to solve equations and word problems 	critically and creatively to solve equations and word problems

Resources
<p>Texts/Materials: <i>Textbook: McGraw Hill MyMath</i></p> <p>Materials: counters, cubes, place value blocks, attribute blocks, Writing Rubric, Big Books, Word Wall, anchor charts</p> <p>Suggested Literature:</p> <ul style="list-style-type: none"> 12 Ways to Get to 11 (Addition) by Eve Merriam A Fair Bear Share (Subtraction) by Stuart J. Murphy Animals on Board (Addition) by Stuart J. Murphy Betcha! (Estimation) by Stuart J. Murphy Coyotes All Around (Estimation) by Stuart J. Murphy Dealing With Addition by Lynette Long Dominoes Addition by Lynette Long Double the Ducks (Doubling) by Stuart J. Murphy Elevator Magic (Subtraction) by Stuart J. Murphy Get and Go (Addition) by Stuart J. Murphy Mission: Addition by Loreen Leedy Monster Musical Chairs (Subtraction) by Stuart J. Murphy Pizza Counting (Addition) by Christina Hobson Quack and Count (Addition) by Keith Baker Ready, Set, Hop (Equations) by Stuart J. Murphy <p>Suggested Links</p> <ul style="list-style-type: none"> http://pearsonsuccessnet.com http://www.brainpopjr.com http://www.primarygames.com

Resources

- <http://www.abcmouse.com>
- <http://www.starfall.com>
- <http://www.destiny.com>
- <http://www.gamequarium.com>
- <http://www.rubistar.4teachers.org>
- <http://kinderwebgames.com>
- <http://www.njcore.org>

Major Assignments (required):

- Unit 1: Math Common Summative Assessment
- **NJ SLS 2.OA.A.1**
CF: Pencil and a Sticker
- **NJ SLS 2.OA.B.2**
CF: Building Towards Fluency
- **NJ SLS 2.MBT.A.1**
CF: Making 124
CF: Largest Number Game
- **NJ SLS 2.MBT.A.2**
- **NJ SLS 2.MBT.A.3**
CF: Looking at Numbers Every
Which Way
- **NJ SLS 2.MBT.A.4**
CF: Ordering 3-digit Numbers
- **NJ SLS 2.MBT.B.8**
CF: Choral Counting

Unit 2: Place Value Strategies for Addition and Subtraction	Recommended Duration: 8 weeks (November- January)
--	--

Unit Description:

Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How does the position of a digit in a number affect its value? • In what ways can numbers be composed and decomposed? • How are place value patterns repeated in numbers? 	<ul style="list-style-type: none"> • Flexible methods of computation involve grouping numbers in strategic ways. • Proficiency with basic facts aids estimation and computation of larger and smaller numbers.

Relevant Standards	Learning Goals	Learning Objectives
Content Standards: Primary or Power 2.OA.A.1 2.OA.B.2 2.OA.C.3 2.OA.C.4 2.G.A.2 2.NBT.B.5 2.NBT.B.6 2.NBT.B.7 2.NBT.B.9 2.NBT.A.2	Students will understand: <ul style="list-style-type: none"> • That equations can be used to express an even number as a sum of two equal addends • How arrays can be used to represent an equation expressing the total as a sum of equal addends. • Different strategies can be used to add and subtract within 50. • Place value and properties of operations can be used to add and subtract up to 4-digit numbers. • How to use drawings to explain why place value and properties of operations work. 	Students will be able to: <ul style="list-style-type: none"> • Determine whether groups of objects contain an even or odd number of objects. • Use repeated addition to find a total in an array • Write an equation to express repeated addition represented by an array. • Partition a rectangle into rows and columns of equal sized squares. • Use a variety of strategies to add and subtract within 50 • Add up to 4-digit numbers using place value and properties of operations. • Use drawings to represent addition and subtraction within 1,000.

Formative Assessments	Summative Assessments	Performance Assessments	Major Activities/ Assignments (required)
<ul style="list-style-type: none"> • One to one conferencing and anecdotal notes • Rubrics • Pre/Post RTI benchmark assessments • Differentiated Facts Centers • Essential Questions • Home Link Review • Mental Math and Reflexes • Math Message • Teaching the Lesson (Vocabulary Infused) • Ongoing Learning and Practice • Differentiation Options • Math Boxes • Games (reinforcement of skill) • Reflection - Essential Questions revisited (Exit Slip, Journal, Orally, etc) 	<ul style="list-style-type: none"> • Math Message • Oral and Slate Assessments • Assessment 	<ul style="list-style-type: none"> • Essential Questions • Class Directions/ Discussion/ Questions • Work on Project 	<ul style="list-style-type: none"> • Unit 2: Math Common Summative Assessment • NJ SLS 2.OA.B.2 CF: Hitting the Target Number • NJ SLS 2.OA.C.3 CF: Red and Blue Tiles • NJ SLS 2.OA.C.4 CF: Counting Dots in an Array • NJ SLS 2.G.A.2 CF: Partitioning a Rectangle in Unit Squares • NJ SLS 2.NBT.B.6 CF: Toll Bridge Puzzle • NJ SLS 2.NBT.B.7 CF: How Many Days until Summer Vacation? • NJ SLS 2.NBT.B.9 CF: Peyton and Presley Discuss Addition

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to EXPRESS their understanding and comprehension of the content/skills taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Modify assignments as needed (e.g., vary length, limit items) • Shorten assignments • Increase the amount of item allowed to complete assignments and tests 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to EXPRESS their understanding and comprehension of the content/skills taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Limit amount of work required or length of tests • Hands-on-projects 	<ul style="list-style-type: none"> • Blocks, clocks • Native language support • Fact Family Triangles • Choice questions • L1 text and/or support • Illustrations/diagrams/drawings • Place Value Chart • Small group 	<ul style="list-style-type: none"> • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • w/coaching to promote self directed learning

Instructional Strategies (refer to Robert Marzano’s 41 Elements)

- Cooperative learning
- Manipulatives, KWL, academic games,
- Mathematic Workstations,
- Read Aloud
- Model think aloud comprehension strategies
- Modeling
- Choice Menus
- Math logs/journals

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Read class materials orally • Provide small group instruction • Provide study outlines/guides • Prior notice of tests • Test study guide 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten Blocks • Native language support 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
	<ul style="list-style-type: none"> • Fact Family Triangles • Choice questions • L1 text and/or support • Teacher Modeling • Illustrations/diagrams/drawings • Place Value Chart • Small group 		

Unit Vocabulary

Essential:

Even, odd, pairs, sum, difference, addends, array, rows, columns, strategy, digit

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
	<ul style="list-style-type: none"> • Students may use computers for reinforcement of skills during centers • Interactive whiteboards may be used to display problems and/or interactive manipulatives 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> • Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> • Students will develop 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> • Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> • Students will develop problem solving skills and practice

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
		<p>problem solving skills and practice verbalizing their reasoning behind it</p> <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> Students are encouraged to think critically and creatively to solve equations and word problems 	<p>verbalizing their reasoning behind it</p> <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> Students are encouraged to think critically and creatively to solve equations and word problems

Resources
<p>Texts/Materials: McGraw Hill MyMath</p> <p>Materials: counters, cubes, work mats, graph paper, Writing Rubric, Big Books, Word Wall, anchor charts</p> <p>Suggested Literature:</p> <ul style="list-style-type: none"> <i>A Million Fish....More or Less</i> by Patricia McKissack <i>Can You Count to a Googol?</i> By Robert E. Wells <i>Earth Day---Hooray!</i> by Stuart J. Murphy <i>How Much is a Million?</i> by David M. Schwartz <i>Millions of Cats</i> by Wanda Gag <i>On Beyond a Million</i> by David M. Schwartz <i>The Blast Off Kid</i> by Laura Driscoll <p>Links:</p> <ul style="list-style-type: none"> http://pearsonsuccessnet.com http://www.brainpopjr.com http://www.primarygames.com http://www.abcmouse.com http://www.starfall.com http://www.destiny.com

Resources

- <http://www.gamequarium.com>

Major Assignments (required):

- Unit 2: Math Common Summative Assessment
- **NJ SLS 2.OA.B.2**
CF: Hitting the Target Number
- **NJ SLS 2.OA.C.3**
CF: Red and Blue Tiles
- **NJ SLS 2.OA.C.4**
CF: Counting Dots in an Array
- **NJ SLS 2.G.A.2**
CF: Partitioning a Rectangle in
Unit Squares
- **NJ SLS 2.NBT.B.6**
CF: Toll Bridge Puzzle
- **NJ SLS 2.NBT.B.7**
CF: How Many Days until
Summer Vacation?
- **NJ SLS 2.NBT.B.9**
CF: Peyton and Presley Discuss

Unit 3: Measurement	Recommended Duration: 8 weeks February-March
----------------------------	--

Unit Description:
 Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length. Students understand that time is made up of intervals of minutes, and use analog and digital clocks to tell and write time to the nearest 5 minutes.

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • What are tools of measurement and how are they used? • What is the purpose of standard units of measurement? • What types of problems are solved with measurement? 	<ul style="list-style-type: none"> • Objects have distinct attributes that can be measured. • Standard units provide common language for communication of measurements. • The choice of measurement tools depends on the measurable attribute and the degree of precision desired. • Estimation is a way to get an approximate answer.

Relevant Standards	Learning Goals	Learning Objectives
Content Standards: Primary or Power 2.MD.A.1 2.MD.A.3 2.MD.A.2 2.MD.A.4 2.MD.B.5 2.MD.B.6 2.MD.C.7 2.NBT.A.2 2.NBT.B.5	<i>Students will understand:</i> <ul style="list-style-type: none"> • Appropriate tools to estimate and measure lengths of objects. • How different units of measurement can be used to measure the length of an object. • How to solve real-world problems involving adding and subtracting length. • That a symbol can be used to represent an unknown number in an equation. • How a number line can be used to represent sums and differences of whole numbers. • That time can be represented in different 	<i>Students will be able to:</i> <ul style="list-style-type: none"> • Estimate lengths of objects • Measure lengths of objects using rulers, yardsticks, meters, and measuring tapes. • Compare lengths of objects • Use a number sentence with a symbol for the unknown to represent a problem. • Equally space points on a number line to represent whole numbers • Use a number line to represent sums and differences within 100. • Tell and write time on analog and digital clocks to the nearest 5 minutes. • Select and use a strategy to add and subtract

Relevant Standards	Learning Goals	Learning Objectives
	<p>ways.</p> <ul style="list-style-type: none"> How to choose an appropriate strategy to add and subtract within 100. 	within 100.

Formative Assessments	Summative Assessments	Performance Assessments	Major Activities/ Assignments (required)
<ul style="list-style-type: none"> One to one conferencing and anecdotal notes Rubrics Pre/Post RTI benchmark assessments Differentiated Facts Centers Essential Questions Home Link Review Mental Math and Reflexes Math Message Teaching the Lesson (Vocabulary Infused) Ongoing Learning and Practice Differentiation Options Math Boxes Games (reinforcement of skill) Reflection - Essential Questions revisited (Exit Slip, Journal, Orally, etc) 	<ul style="list-style-type: none"> Math Message Oral and Slate Assessments Assessment 	<ul style="list-style-type: none"> Essential Questions Class Directions/ Discussion/ Questions Work on Project 	<ul style="list-style-type: none"> Unit 3: Common Summative Assessment NJ SLS 2.MD.A.1.3.4 CF: Determining Length NJ SLS 2.MD.B.5 CF: High Jump Competition NJ SLS 2.MD.B.6 CF: Frog and Toad on the Number Line NJ SLS 2.MD.C.7 CF: Ordering Time

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to EXPRESS their understanding and comprehension of the content/skills taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Modify assignments as needed (e.g., vary length, limit items) • Shorten assignments • Increase the amount of item allowed to complete assignments and tests • Limit amount of work required or length of tests • Hands-on-projects 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten Blocks, clocks • Native language support • Fact Family Triangles • Choice questions • L1 text and/or support • Illustrations/diagrams/drawings • Place Value Chart • Small group 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Instructional Strategies (refer to Robert Marzano’s 41 Elements)

- Cooperative learning
- Manipulatives, KWL, academic games,
- Mathematic Workstations,
- Read Aloud
- Model think aloud comprehension strategies
- Modeling
- Choice Menus
- Math logs/journals

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Read class materials orally • Provide small group instruction 	<ul style="list-style-type: none"> • Word/Picture Wall • Number Line 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten) 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): *How will the teacher provide multiple means for the following student groups to **ACCESS** the content/skills being taught?*

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Provide study outlines/guides • Prior notice of tests • Test study guide 	<ul style="list-style-type: none"> • Hundreds Chart • Ten-Frame • Manipulatives, Counters, Connecting Cubes, Base-Ten Blocks • Native language support • Fact Family Triangles • Choice questions • L1 text and/or support • Teacher Modeling • Illustrations/diagrams/drawings • Place Value Chart • Small group 	<ul style="list-style-type: none"> • Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Unit Vocabulary

Essential:
 Measure, length, ruler, yardstick, meterstick, measuring tape, inches, centimeters, estimate, longer, shorter, unit, number line, analog, digital, am, pm

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
	<ul style="list-style-type: none"> • Students may use computers for reinforcement of skills during centers • Interactive whiteboards may be used to display problems and/or interactive manipulatives 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p>	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> • Students will work with a partner

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
		<ul style="list-style-type: none"> Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> Students are encouraged to think critically and creatively to solve equations and word problems 	<p>and/or small group on various math activities</p> <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> Students are encouraged to think critically and creatively to solve equations and word problems

Resources
<p>Texts/Materials: <i>McGraw Hill MyMath</i></p> <p>Materials: rulers, yardsticks, meter sticks, measuring tape, analog clocks, number line, Writing Rubric, Big Books, Word Wall, anchor charts</p> <p>Links:</p> <ul style="list-style-type: none"> http://pearsonsuccessnet.com http://www.brainpopjr.com http://www.primarygames.com http://www.abcmouse.com http://www.starfall.com http://www.destiny.com http://www.gamequarium.com

Resources

- <http://www.rubistar.4teachers.org>

Major Assignments (required):

- Unit 3: Common Summative Assessment
- **NJ SLS 2.MD.A.1.3.4**
CF: Determining Length
- **NJ SLS 2.MD.B.5**
CF: High Jump Competition
- **NJ SLS 2.MD.B.6**
CF: Frog and Toad on the
Number Line
- **NJ SLS 2.MD.C.7**
CF: Ordering Time

Unit 4: Reason with Shapes and Represent Data	Recommended Duration: 8 weeks (April-May)
Unit Description: Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.	

Essential Questions	Enduring Understandings
<ul style="list-style-type: none"> • How are geometric properties used to solve problems in everyday life? • How can plane and solid shapes be described? • How are geometric figures constructed? 	<ul style="list-style-type: none"> • Objects can be described and compared using their geometric attributes. • Transforming an object does not affect its attributes. • Some shapes can be partitioned into equal shares, which can be described using fractions.

Relevant Standards	Learning Goals	Learning Objectives
Content Standards: Primary or Power 2.G.A.1 2.G.A.3 2.MD.C.8 2.MD.D.9 2.MD.D.10 2.OA.B.2 2.NBT.B.5	Students will understand: <ul style="list-style-type: none"> • That shapes have attributes that can be used to identify them. • How “halves,” “thirds,” half of,” etc. can be used to describe equal shares of partitioned shapes. • How to solve and represent word problems involving money • How to represent and read data presented on a line plot, picture graph, or bar graph. • How mental strategies can be used to increase addition and subtraction fluency 	Students will be able to: <ul style="list-style-type: none"> • Draw shapes given specific attributes • Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. • Partitions shapes into 2,3, and 4 equal shares, and describe each share. • Solve word problems involving dollar bills and coins • Use tools to measure objects, and represent that data on a line plot. • Draw a picture graph and bar graph to represent data.

Relevant Standards	Learning Goals	Learning Objectives
	<p>to 20.</p> <ul style="list-style-type: none"> That place value, properties of operations and the relationship between addition and subtraction can be used to fluently add and subtract within 100. 	<ul style="list-style-type: none"> Fluently add and subtract within 20 using mental strategies Fluently add and subtract within 100 using place value, properties of operations and the relationship between addition and subtraction

Formative Assessments	Summative Assessments	Performance Assessments	Major Activities/ Assignments (required)
<ul style="list-style-type: none"> One to one conferencing and anecdotal notes Rubrics Pre/Post RTI benchmark assessments Differentiated Facts Centers Essential Questions Home Link Review Mental Math and Reflexes Math Message Teaching the Lesson (Vocabulary Infused) Ongoing Learning and Practice Differentiation Options Math Boxes Games (reinforcement of skill) Reflection - Essential Questions revisited (Exit Slip, Journal, Orally, etc) 	<ul style="list-style-type: none"> Math Message Self-Assessment Oral and Slate Assessments Assessment 	<ul style="list-style-type: none"> Essential Questions Class Directions/Discussion/Questions 	<ul style="list-style-type: none"> Unit 4: Common Summative Assessment NJSJS 2.MD.C.8 CF: Delayed Gratification NJSJS 2.MD.D.9 CF: Hand Span Measures CF: The Longest Walk NJSJS 2.MD.D.10 CF: Favorite Ice Cream Flavor NJSJS 2.NBT.B.5 CF: Saving Money 1 CF: Saving Money 2

Possible Assessment Adjustments (Modifications /Accommodations/ Differentiation): How will the teacher provide multiple means for the following student groups to **EXPRESS** their understanding and comprehension of the content/skills taught?

Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Modify assignments as needed (e.g., vary length, limit items) • Shorten assignments • Increase the amount of item allowed to complete assignments and tests • Limit amount of work required or length of tests • Hands-on-projects 	<ul style="list-style-type: none"> • Word/Picture Wall • L1 support • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Native language support • Fact Family Triangles • Choice questions • Teacher Modeling 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings • 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self-directed learning

Instructional Strategies (refer to Robert Marzano’s 41 Elements)

- Manipulatives, KWL, academic games,
- Mathematic Workstations,
- Read Aloud
- Model think aloud comprehension strategies
- Modeling
- Choice Menus
- Math logs/journals Choice Menus
- Reading logs/journals

Possible Instructional Adjustments (Modifications /Accommodations/ Differentiation): <i>How will the teacher provide multiple means for the following student groups to ACCESS the content/skills being taught?</i>			
Special Education Students	English Language Learners (ELLs)	At-Risk Learners	Advanced Learners
<ul style="list-style-type: none"> • Read class materials orally • Provide small group instruction • Provide study outlines/guides • Prior notice of tests • Test study guide 	<ul style="list-style-type: none"> • Word/Picture Wall • L1 support • Word/Picture Wall • Number Line • Hundreds Chart • Ten-Frame • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Native language support • Fact Family Triangles • Choice questions • Teacher Modeling • Illustrations/diagrams/drawings • Small group 	<ul style="list-style-type: none"> • Manipulatives (etc. Counters, Connecting Cubes, Base-Ten Blocks, Place Value T-Chart, clock,) • Teacher Modeling • Small group instruction • Extended time • Illustrations/diagrams/drawings 	<ul style="list-style-type: none"> • Provide independent learning opportunities through learning contracts • Offer accelerated instruction • Computer-Assisted Instruction • Pairing direct instruction w/coaching to promote self directed learning

Unit Vocabulary
<p>Essential: Attributes, faces, angles, triangle, quadrilateral, pentagon, hexagon, cube equal share, partition, half, thirds, fourths, picture graph, bar graph, line plot</p>

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21st Century Themes	21st Century Skills
	<ul style="list-style-type: none"> • Students may use computers for reinforcement of skills during centers • Interactive whiteboards may be used to display problems and/or 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately 	<p>Leadership and Responsibility- Acting responsibly with the interests of the larger community in mind.</p> <ul style="list-style-type: none"> • Students will participate in class activities and discussions appropriately <p>Collaboration- Demonstrating the ability</p>

Interdisciplinary Connections (Applicable Standards)	Integration of Technology	21 st Century Themes	21 st Century Skills
	interactive manipulatives	<p>Collaboration- Demonstrating the ability to work with diverse teams</p> <ul style="list-style-type: none"> • Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> • Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> • Students are encouraged to think critically and creatively to solve equations ,word problems, and complex shapes 	<p>to work with diverse teams</p> <ul style="list-style-type: none"> • Students will work with a partner and/or small group on various math activities <p>Critical Thinking and Problem Solving- Exercising sound reasoning in understanding</p> <ul style="list-style-type: none"> • Students will develop problem solving skills and practice verbalizing their reasoning behind it <p>Creativity and Innovation- Demonstrating originality and inventiveness in work</p> <ul style="list-style-type: none"> • Students are encouraged to think critically and creatively to solve equations ,word problems, and complex shapes

Resources
<p>Texts/Materials: McGraw Hill MyMath</p> <p>Materials: Writing Rubric, Big Books, Word Wall, anchor charts, attribute blocks, counters, work mats</p> <p>Suggested Literature:</p> <ul style="list-style-type: none"> • <i>A Cloak for the Dreamer (Shapes)</i> by Aileen Friedman • <i>Cubes, Cones, Cylinders, and Spheres</i> by Tana Hoban • <i>Eight Hands Round (Shapes)</i> by Ann Whitford Paul

Resources

- *Grandfather Tang's Story* (Spatial/Shapes) by Ann Tompert
- *Round is a Mooncake: A Book about Shapes* by Roseanne Thong
- *Shape of Things* by Dayle Ann Dodds
- *Shape Up! Fun with Triangles and Other Polygons* by David A. Adler
- *Shapes, Shapes* by Tana Hoban
- *So Many Circles, So Many Squares* by Tana Hoban
- *The Adventures of Penrose* by Theoni Pappas
- *The Greedy Triangle* (Shapes) by Marilyn Burns
- *The Shape Game* by Anthony Browne
- *The Wing on a Flea* (Shapes) by Ed Emberlt

Links:

- <http://pearsonsuccessnet.com>
- <http://www.brainpopjr.com>
- <http://www.primarygames.com>
- <http://www.abcmouse.com>
- <http://www.starfall.com>
- <http://www.destiny.com>
- <http://www.gamequarium.com>
- <http://www.rubistar.4teachers.org>
-

Major Assignments (required):

- Unit 4: Common Summative Assessment
- **NJSJS 2.MD.C.8**
CF: Delayed Gratification
- **NJSJS 2.MD.D.9**
CF: Hand Span Measures
CF: The Longest Walk
- **NJSJS 2.MD.D.10**
CF: Favorite Ice Cream Flavor
- **NJSJS 2.NBT.B.5**
CF: Saving Money 1
CF: Saving Money 2