



Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:

Meeting the needs of all students with a proud tradition of academic excellence.

Curriculum Development Timeline

School: Township of Ocean Elementary Schools

Course: Mathematics, Grade 1

Department: Mathematics

Board Approval	Supervisor	Notes
August 2006	Justine Salvo	Born Date
November 2011	Christine Picerno	Revisions
December 2017	Christine Picerno	Revisions
March 2019	Christine Picerno	Review

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Marking Period 1		Marking Period 2	
1	Operations & Algebraic Thinking	11	Operations & Algebraic Thinking
2	Operations & Algebraic Thinking	12	Operations & Algebraic Thinking
3	Operations & Algebraic Thinking	13	Operations & Algebraic Thinking
4	Operations & Algebraic Thinking	14	Measurement & Data
5	Operations & Algebraic Thinking	15	Measurement & Data
6	Operations & Algebraic Thinking	16	Measurement & Data
7	Operations & Algebraic Thinking	17	Number & Operations in Base Ten
8	Operations & Algebraic Thinking	18	Number & Operations in Base Ten
9	Operations & Algebraic Thinking	19	Number & Operations in Base Ten
10	Operations & Algebraic Thinking	20	Number & Operations in Base Ten
Marking Period 3		Marking Period 4	
21	Number & Operations in Base Ten	31	Geometry
22	Number & Operations in Base Ten	32	Geometry
23	Number & Operations in Base Ten	33	Geometry
24	Number & Operations in Base Ten	34	Geometry
25	Number & Operations in Base Ten	35	Operations & Algebraic Thinking
26	Measurement & Data	36	Operations & Algebraic Thinking
27	Measurement & Data	37	Operations & Algebraic Thinking
28	Measurement & Data	38	Operations & Algebraic Thinking
29	Measurement & Data	39	Operations & Algebraic Thinking
30	Geometry	40	Operations & Algebraic Thinking

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Time Frame	September-December Ongoing
Topic	
Operations & Algebraic Thinking	
Essential Questions	
<ul style="list-style-type: none">● What do the best problem solvers do?● What does it mean to reason mathematically?● How do I know when an answer is reasonable?● What makes a mathematical argument convincing?● How do patterns help us solve problems?● Why is the ability to solve problems the heart of mathematics?● When would an estimate be more useful than an exact answer?● What similar problems does this remind me of?● Why do I need mathematical operations?	
Enduring Understandings	
Students will understand that...	
<ul style="list-style-type: none">● Computation involves taking apart and combining numbers using a variety of approaches.● Flexible methods of computation involve grouping numbers in strategic ways.● Developing number sense helps to solve problems in a variety of ways.● Different math approaches can yield the same results.● The equal sign means "the same as".	

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Alignment to NJSLS

1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.B.3 Apply properties of operations as strategies to add and subtract.

1.OA.B.4 Understand subtraction as an unknown-addend problem.

1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.

Key Concepts and Skills

- Add and subtract within 10.
- Visualize equality.
- Use = to write addition equations and determine if an equation is true.
- Find the total in addition equations.
- Count on from the greater number to add.
- Represent and solve addition and subtraction story problems.
- Write and solve subtraction equations.
- Relate addition and subtraction and solve vertical forms.
- Relate partners and totals and find an unknown partner.
- Solve story problems and equations with unknown partners.
- Model and relate addition and subtraction situations

Learning Activities

Unit 1 emphasizes the 1-more and 1-less pattern, first with counting numbers, then with finding partners, and finally with addition and subtraction. The repeated experiences in Unit 1 are a bridge from Kindergarten experiences to the embedded addends required for counting on. It takes time for children to build understanding of such embedded addends, but this is crucial, and they need to see them for each number through 10.

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Additionally, children begin to recognize addition and subtraction problem types and write equations to represent addition and subtraction situations. Equations are emphasized as children discuss different types of equations, decide if they are true or false, and relate addition and subtraction equations. They develop strategies for adding and subtracting within 10.

Finally, this unit focuses on unknown partners represented as both addition and subtraction situations. Children adapt strategies for finding an unknown total to finding an unknown partner. Children write both equations and answers with labels for word problems. Fluency practice within 10 continues in this unit and then children will begin to explore addition and subtraction within 20.

enVision Math 2.0 Units of Study

Topic 1 - Solve Addition and Subtraction

Topic 2 - Fluently Add and Subtract Within 10

Topic 3 - Addition Facts to Addition Facts to 20: Use Strategies

Topic 4 - Subtraction Facts to 20: Use Strategies

Curriculum Resources

Math Literature:

- Dinner at the Panda Palace by Stephanie Calmenson
- Domino Addition by Lynette Long
- More Bugs? Less Bugs? by Don Curry
- Math Fables: Lessons That Count by Greg Tang

enVision Math 2.0 Resources:

- Realize Online Platform
- Math Center Challenges
- MDIS - Math Diagnostic and Intervention System
- Student Editions
- Response to Intervention Tiered Materials

Assessments

Formative Assessments

- Teacher Observation
- Exit Slips/Check for Understanding
- Games
- Anecdotal Records
- Oral Assessments/Conferencing
- Daily Classwork
- Pre-Assessment
- Homework pages
- Fluency Check
- Quick Quiz
- Student Activity Pages

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Summative Assessments

- Quick Quiz
- Performance Task
- Unit Test

Benchmark Assessment

- EOY Benchmark 1

Alternative Assessment:

- Create and Illustrate a More or Less Math Story

21st-Century Skills

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Career Ready Practices

CRP 4. SW communicate clearly and effectively and with reason during the Solve and Share portion of the lesson.

CRP 8. SW utilize critical thinking to make sense of problems and persevere in solving independent practice problems.

CRP 11. SW use technology to enhance productivity by accessing the Pearson Platform.

Interdisciplinary Connections

Language Arts Learning Activities:

- Build a strong base of knowledge through content-rich texts
- Read, write, and speak grounded in evidence
- Construct viable arguments and critique the reasoning of others
- Engage in argument from evidence

Alignment to Standards:

- **RL.1.1.** Ask and answer questions about key details in a text.
- **RL.1.7.** Use illustrations and details in a story to describe its characters, setting, or events.

Science Learning Activities:

- Model with mathematics
- Develop and use models
- Use mathematics, information and computer technology, and computational thinking

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Alignment to Standards:

- **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- **K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Technology Integration

Technology Learning Activities:

- Students use Chromebooks to access Pearson Realize platform to practice and reinforce skills and concepts.
- Students will use Google Classroom to access links to: interactive activities and math games.
- Students will access various websites, such as, Prodigy, Arcademics, Cool Math and IXL to practice and reinforce math skills.

Alignment to Standards:

- **TECH.8.1.2** All students will use digital tools to access, manage, evaluate and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
- **TECH.8.1.2.A.CS2** Select and use applications effectively and productively
- **TECH.8.2.2.C** The design process is a systematic approach to solving problems

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Time Frame	January-February Ongoing
Topic	
Numbers and Operations in Base Ten	
Essential Questions	
<ul style="list-style-type: none">● What is the best way to count?● How are relationships helpful in mathematics?● What makes a strategy for computing effective and efficient?● How is math a language?● What would be impossible if we had no numbers?● Why is it useful to compose and decompose numbers?	
Enduring Understandings	
Students will understand that... <ul style="list-style-type: none">● Place value is based on groups of 10.● Place value understanding is essential when reading, writing, modeling, and computing with whole numbers.● Computation involves taking apart and combining numbers using a variety of approaches.● Flexible methods of computation involve grouping numbers in strategic ways.● Developing number sense helps to solve problems in a variety of ways.● Different math approaches can yield the same results.	

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Alignment to NJSLs

1.NBT.A.1 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

- **2a** 10 can be thought of as a bundle of ten ones — called a “ten.”
- **2b** The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- **2c.** The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

1.NBT.B.3 Compare two-digit numbers based on meanings of the tens and ones digits, recording the results of comparison with the symbols $>$, $=$, and $<$.

1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Key Concepts and Skills

- Recognize 10 as a group of ten ones and count decade numbers as groups of ten. Recognize that teen numbers are composed of a ten and extra ones
- Model and compare teen numbers
- Solve equations with unknown partners.
- Represent two digit numbers as tens and ones.
- Read and write numerals and number words
- Add a 1-digit number to a 2-digit number.
- Compare two 2-digit numbers.
- Distinguish between adding ones and adding tens, and add 1 or 10 to other numbers.
- Add ones or tens to decade numbers
- Count on into the next decade
- Add with tens and ones.
- Solve teen addition and subtraction problems with various unknowns.
- Solve problems with three addends.

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- Count large quantities of objects by tens and ones.
- Count and write numbers to 120 and find 10 more and 10 less than a given number.
- Add tens to 2-digit numbers and subtract tens from decade numbers.
- Add and subtract decade numbers.
- Add two-digit numbers

Learning Activities

This unit builds on the work with teen numbers that began in Kindergarten. Children explore tens and ones using physical groupings and math drawings. Activities provide repeated experience in building 2-digit numbers with strong visual support. Children extend these place value concepts to adding with 1-and 2-digit numbers.

Additionally, this unit extends the strategies for unknown partners in addition and subtraction situations. The methods for finding totals and differences within 10 are used in this unit for totals within 20. Both strategies, Counting On and Making a Ten also appear in this unit. The problem types for totals and differences within 10, appear again in this unit for totals and differences within 20. Problem types, models, and drawings are all woven together in this unit so children can access prior knowledge as they work with greater numbers. When children see familiar models, strategies, and games, it is like meeting an old friend. They know how to do the activities and more easily make a small stretch to greater numbers.

enVision Math 2.0 Units of Study

Topic 5 - Work with Addition and Subtraction Equations

Topic 6 - Represent and Interpret Data

Topic 7 - Extend the Counting Sequence

Topic 8 - Understand Place Value

Curriculum Resources

Math Literature:

- 100 Days of School by Trudy Harris
- One Guinea Pig Is Not Enough by Kate Duke
- Tail Feather Fun by Michael Dahl
- Chicka Chicka 1, 2, 3 by Bill Martin Jr. and Michael Sampson
- The Smushy Bus by Leslie Helakoski

enVision Math 2.0 Resources:

- Realize Online Platform
- Math Center Challenges
- MDIS - Math Diagnostic and Intervention System
- Student Editions
- Response to Intervention Tiered Materials

Assessments

Formative Assessments

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- Teacher Observation
- Exit Slips/Check for Understanding
- Games
- Anecdotal Records
- Oral Assessments/Conferencing
- Daily Classwork
- Pre-Assessment
- Homework pages
- Fluency Check
- Quick Quiz
- Student Activity Pages

Summative Assessments

- Quick Quiz
- Performance Task
- Unit Test

Alternative Assessment:

- 100th Day of School Project

21st-Century Skills

9.2.4.A.1 Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.

Career Ready Practices

CRP 4. SW communicate clearly and effectively and with reason while working collectively on the Solve and Share portion of the lesson

CRP 8. SW utilize critical thinking to make sense of independent practice problems and persevere in solving them.

CRP 11. SW use technology to enhance productivity by accessing the Arcademics website.

Interdisciplinary Connections

Language Arts Learning Activities::

- Build a strong base of knowledge through content-rich texts
- Read, write, and speak grounded in evidence
- Construct viable arguments and critique the reasoning of others
- Engage in argument from evidence

Alignment to Standards:

- **RL.1.1.** Ask and answer questions about key details in a text.
- **RL.1.7.** Use illustrations and details in a story to describe its characters, setting, or

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events.

- **RI.1.1.** Ask and answer questions about key details in a text
- **NJSLSA.W1.** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Science Learning Activities:

- Model with mathematics
- Develop and use models
- Use mathematics, information and computer technology, and computational thinking

Alignment to Standards:

- **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- **K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Technology Integration

Technology Learning Activities:

- Students use Chromebooks to access Pearson Realize platform to practice and reinforce skills and concepts.
- Students will use Google Classroom to access links to: interactive activities and math games.
- Students will access various websites, such as, Prodigy, Arcademics, Cool Math and IXL to practice and reinforce math skills.

Alignment to Standards:

- **TECH.8.1.2** All students will use digital tools to access, manage, evaluate and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
- **TECH.8.1.2.A.CS2** Select and use applications effectively and productively
- **TECH.8.2.2.C** The design process is a systematic approach to solving problems

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Time Frame	March-April Ongoing
Topic	
Measurement and Data	
Essential Questions	
<ul style="list-style-type: none"> ● How does "what" is measured influence "how" it is measured? ● What is the connection between the type of data and the type of display? ● How can we compare the size of objects when we can't put them next to each other? ● How can we be sure something is really bigger and agree on its size? 	
Enduring Understandings	
Students will understand that...	
<ul style="list-style-type: none"> ● Graphs organize information and help us analyze data. ● Time is an essential skill needed to navigate everyday situations. ● Objects have distinct attributes that can be measured and compared using non-standard units. 	
Alignment to NJSL	
<p>1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.</p> <p>1.MD.B.3 Tell and write time in hours and half--hours using analog and digital clocks.</p> <p>1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another</p>	
Key Concepts and Skills	
<ul style="list-style-type: none"> ● Organize, represent, and interpret categorical data. ● Collect, organize, represent, and interpret data with three categories. ● Tell and write time in hours. ● Show, tell and write time in hours. ● Tell and write time in hours and half-hours. ● Measure objects with same-size length units. ● Compare and order objects by length ● Use the NJSL and Math Practices in a variety of real world problem solving situations. 	
Learning Activities	
<p>In this unit, children use what they know about sorting and classifying to sort and display data. They build on what they know about comparing numbers to develop comparison statements for a</p>	

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set of data. These comparison statements lead them to use drawings to solve comparison problems. Children also learn some of the important basic concepts about measurement so that they will easily transition to using rulers. Measuring time units is also included in this unit. Children work with both analog and digital clocks as they read and tell time using clocks.

enVision Math 2.0 Units of Study

Topic 9 - Compare Two-Digit Numbers

Topic 10 - Use Models and Strategies to Add Tens and Ones

Topic 11 - Use Models and Strategies to Subtract Tens

Topic 12 - Measure Lengths

Curriculum Resources

Math Literature:

- The Great Graph Contest by Loreen Leedy

enVision Math 2.0 Resources:

- Realize Online Platform
- Math Center Challenges
- MDIS - Math Diagnostic and Intervention System
- Student Editions
- Response to Intervention Tiered Materials

Assessments

Formative Assessments

- Teacher Observation
- Exit Slips/Check for Understanding
- Games
- Anecdotal Records
- Oral Assessments/Conferencing
- Daily Classwork
- Pre-Assessment
- Homework pages
- Fluency Check
- Quick Quiz
- Student Activity Pages

Summative Assessments

- Quick Quiz
- Performance Task
- Unit Test

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Benchmark Assessment:

- EOY Benchmark 3

Alternative Assessments:

- Create and use models to add tens and ones
- Create and use models to subtract by tens.

21st-Century Skills

9.2.4.A.2 Identify various life roles and civic and work-related activities in the school, home, and community.

Career Ready Practices

CRP 4. SW communicate clearly and effectively and with reason when explaining how they solved the DCCR problems.

CRP 6. Demonstrate creativity and innovation while creating their models.

CRP 11. Use technology to enhance productivity while completing the Quick Check online.

Interdisciplinary Connections

Language Arts Learning Activities:

- Build a strong base of knowledge through content-rich texts
- Read, write, and speak grounded in evidence
- Construct viable arguments and critique the reasoning of others
- Engage in argument from evidence

Alignment to Standards:

- **RL.1.7.** Use illustrations and details in a story to describe its characters, setting, or events.
- **NJSLSA.W1.** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Science Learning Activities:

- Model with mathematics
- Develop and use models
- Use mathematics, information and computer technology, and computational thinking

Alignment to Standards:

- **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- **K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
- **K-2-ETS1-3.** Analyze data from tests of two objects designed to solve the same

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problem to compare the strengths and weaknesses of how each performs
Technology Integration
<p>Technology Learning Activities:</p> <ul style="list-style-type: none"> • Students use Chromebooks to access Pearson Realize platform to practice and reinforce skills and concepts. • Students will use Google Classroom to access links to: interactive activities and math games. • Students will access various websites, such as, Prodigy, Arcademics, Cool Math and IXL to practice and reinforce math skills. <p>Alignment to Standards:</p> <ul style="list-style-type: none"> • TECH.8.1.2 All students will use digital tools to access, manage, evaluate and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge. • TECH.8.1.2.A.CS2 Select and use applications effectively and productively • TECH.8.2.2.C The design process is a systematic approach to solving problems

Time Frame	May-June Ongoing
Topic	
Geometry	
Essential Questions	
<ul style="list-style-type: none"> • How can shapes be broken into simpler parts? • What attributes are important for naming shapes? • When is one object or shape bigger than another? • What determines big and small? 	
Enduring Understandings	
<p>Students will understand that...</p> <ul style="list-style-type: none"> • Shapes can be classified by their attributes. • Geometric properties can be used to construct two dimensional figures. • Equal shares can be represented in different ways. 	

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Alignment to NJSLS

1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

1.G.A.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

Key Concepts and Skills

- Distinguish between defining and non-defining attributes of squares, rectangles, triangles and circles.
- Partition circles and rectangles into two or four equal shares.
- Compose 2-dimensional shapes, and compose new shapes from the composite shape.
- Identify attributes of 3-dimensional shapes, and compose rectangular prisms.
- Use the Common NJSLS and Math Practices in a variety of real world problem solving situations.

Learning Activities

This unit builds on the geometry concepts and knowledge that children bring from Kindergarten. The focus of geometry is composing shapes. This helps children build mental images as they compose and describe the new shapes they are building. Children explore 2- and 3- dimensional shapes using unique manipulatives. Children's work with composing and decomposing shapes, properties of shapes, and equal shares involves the basic reasoning children will apply to work with fractions, congruence, and symmetry in later grades.

enVision Math 2.0 Units of Study

Topic 13- Time

Topic 14 - Reason with Shapes and Their Attributes

Topic 15 - Equal Shares of Circles and Rectangles

Step Up Lessons to Grade 2

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Curriculum Resources

Math Literature:

- Building with Shapes by Rebecca Weber

enVision Math 2.0 Resources:

- Realize Online Platform
- Math Center Challenges
- MDIS - Math Diagnostic and Intervention System
- Student Editions
- Response to Intervention Tiered Materials

Assessments

Formative Assessments

- Teacher Observation
- Exit Slips/Check for Understanding
- Games
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- Oral Assessments/Conferencing
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Summative Assessments

- Quick Quiz
- Performance Task
- Unit Test

Benchmark Assessment

- EOY Benchmark 3

Alternative Assessments:

- Math Center Challenges

21st-Century Skills
Career Ready Practices

CRP 4. SW communicate clearly and effectively and with reason when explaining how they solved

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the problem solving questions.

CRP 6. SW demonstrate creativity and innovation while at their Math Center Challenges.

CRP 8. SW utilize critical thinking to make sense of independent practice problems and persevere in solving them.

CRP 11. SW use technology to enhance productivity by accessing Prodigy.

Interdisciplinary Connections

Language Arts Learning Activities:

- Build a strong base of knowledge through content-rich texts
- Read, write, and speak grounded in evidence
- Construct viable arguments and critique the reasoning of others
- Engage in argument from evidence

Alignment to Standards:

- **RL.1.7.** Use illustrations and details in a story to describe its characters, setting, or events.
- **RI.1.1.** Ask and answer questions about key details in a text

Science Learning Activities:

- Model with mathematics
- Develop and use models
- Use mathematics, information and computer technology, and computational thinking

Alignment to Standards:

- **K-2-ETS1-1.** Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
- **K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Technology Integration

Technology Learning Activities:

- Students use Chromebooks to access Pearson Realize platform to practice and reinforce skills and concepts.
- Students will use Google Classroom to access links to: interactive activities and math games.
- Students will access various websites, such as, Prodigy, Arcademics, Cool Math and IXL to practice and reinforce math skills.

Alignment to Standards:

- **TECH.8.1.2** All students will use digital tools to access, manage, evaluate and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

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- **TECH.8.1.2.A.CS2** Select and use applications effectively and productively

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Modifications (ELL, Special Education, At-Risk Students, Gifted and Talented, and 504 Plans)

ELL:

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher models reading aloud daily
- Provide peer tutoring
- Use of Bilingual Dictionary
- Guided notes and/or scaffold outline for written assignments
- Provide students with English Learner leveled readers.

Supports for Students With IEPs:

- Allow extra time to complete assignments or tests
- Guided notes and/or scaffold outline for written assignments
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications

At-Risk Students:

- Guided notes and/or scaffold outline for written assignments
- Introduce key vocabulary before lesson
- Work in a small group
- Lesson taught again using a differentiated approach
- Allow answers to be given orally or dictated
- Use visuals / Anchor Charts
- Leveled texts according to ability

Gifted and Talented:

- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations

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- Propose interest-based extension activities
- Expose students to beyond level texts.

Supports for Students With 504 Plans:

- Follow all the 504 plan modifications
- Text to speech/audio recorded selections
- Amplification system as needed
- Leveled texts according to ability
- Fine motor skill stations embedded in rotation as needed
- Modified or constrained spelling word lists
- Provide anchor charts with high frequency words and phonemic patterns

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