

Green Township School District Grade 1 Mathematics Curriculum - Revised 2017

Unit 1: Sums & Differences to 10

(Approximate Instructional Time: 9 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 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, <i>e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</i> *(benchmarked) 	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): Symbol (unknowns) can be in any position Students are able to: <ul style="list-style-type: none"> add, using objects and drawings (e.g. pictures, number bonds), to solve word problems involving situations of adding to and putting together. subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. Learning Goal 1: Use addition and subtraction <u>within 10</u> to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.
<ul style="list-style-type: none"> 1.OA.C.5. Relate counting to addition and subtraction (e.g., by counting 2 to add 2). 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure.	Concept(s): Counting can be used to add and subtract. Students are able to: <ul style="list-style-type: none"> count on to add. count back to subtract. see and describe numbers of objects using <i>1 more</i> within 5 group configurations Learning Goal 2: Count on to add and count backwards to subtract to solve addition and subtraction problems <u>within 10</u> .
<ul style="list-style-type: none"> 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 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): Different strategies can be used to add and subtract. Students will be able to: <ul style="list-style-type: none"> add and subtract <u>within 10</u>, using the following strategies: <ul style="list-style-type: none"> counting on; making ten;

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<p>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 $6 + 6 + 1 = 12 + 1 = 13$) *(benchmarked)</p>		<ul style="list-style-type: none"> - composing numbers; - decomposing numbers; - relationship between addition and subtraction, and - creating equivalent but easier or known sums. <ul style="list-style-type: none"> ● fluently add or subtract whole numbers <u>within 10</u>. <p>Learning Goal 3: Add and subtract whole numbers <u>within 10</u> using various strategies: counting on, making ten, composing, decomposing, relationship between addition and subtraction, creating equivalent but easier or known sums, etc.</p>
<ul style="list-style-type: none"> ● 1.OA.D.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<p>Concept(s): Addition and subtraction within 10</p> <p>Students are able to:</p> <ul style="list-style-type: none"> ● determine the unknown number that makes an equation true. ● solve addition or subtraction equations by finding the missing whole number. <p>Learning Goal 4: Solve addition and subtraction equations, <u>within 10</u>, by finding the missing whole number in any position.</p>
<ul style="list-style-type: none"> ● 1.OA.B.3. Apply properties of operations as strategies to add and subtract. <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i> <i>(Students need not use formal terms for these properties)</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Knowing $4 + 3$ means that $3 + 4$ is also known (commutative property/fact families). ● When adding, the numbers need not be added in any particular order. <p>Students are able to:</p> <ul style="list-style-type: none"> ● add and subtract, within 10, using properties of operations as strategies (commutative property). <p>Learning Goal 5: Apply properties of operations (commutative property) as strategies to add or subtract <u>within 10</u>.</p>
<ul style="list-style-type: none"> ● 1.OA.D.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● The meaning of the equal sign ● True and false statements ● The expression can be on the right side of the equal sign (e.g. $7 = 8 - 1$).

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<p><i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i></p>	<p>MP.6 Attend to precision. MP.7 Look for and make use of structure.</p>	<ul style="list-style-type: none"> ● Both the left and right side of the equal sign may contain expressions (e.g. $5 + 2 = 1 + 4$). <p>Students are able to:</p> <ul style="list-style-type: none"> ● determine if addition equations are true or false. ● determine if subtraction equations are true or false. <p>Learning Goal 6: Determine if addition and subtraction equations, <u>within 10</u>, are true or false.</p>
<ul style="list-style-type: none"> ● 1.OA.B.4. Understand subtraction as an unknown-addend problem. <i>For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8</i> 	<p>MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Subtraction can be represented as an unknown-addend problem. ● Finding 9 minus 3 means solving $? + 3 = 9$ or $3 + ? = 9$ (fact families). <p>Students are able to:</p> <ul style="list-style-type: none"> ● represent subtraction as an unknown addend problem. ● solve subtraction problems, <u>within 10</u>, using unknown addends. <p>Learning Goal 7: Solve subtraction problems, <u>within 10</u>, by representing subtraction as an unknown added problem and finding the unknown addend.</p>
<p><u>Interdisciplinary Connections:</u></p> <p><u>NGSS Appendix for Alignment</u></p>	<p><u>Science:</u> 1-ESS1. <i>Science example: There were 16 hours of daylight yesterday. On December 21, there were only 8 hours of daylight. How many more hours of daylight were there yesterday?</i></p> <p><u>English-Language Arts:</u> RI.1.1. Ask and answer questions about key details in a text. RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI.1.10. With prompting and support, read informational texts at grade level text complexity or above. RF.1.4. Read with sufficient accuracy and fluency to support comprehension. A. Read grade-level text with purpose and understanding. B. Read grade-level text orally with accuracy, appropriate rate, and expression. C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary. W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p>	

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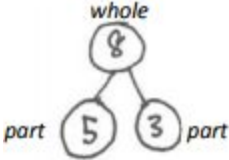
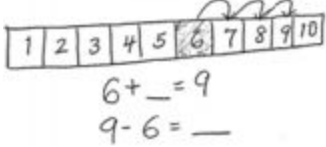
	<p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p> <p>SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p> <p>SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p>
<p><u>21st Century Skills/ Career Ready Practices:</u></p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p><u>2014 NJ Technology Standards:</u></p>	<p>8.1 Educational Technology (Word PDF) All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word PDF) All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>Please see relevant projects for technology standards 8.1 and 8.2:</p>

<p>District/School Primary and Supplementary Resources</p>	
<p>Primary Resource:</p> <p><u>Eureka Math (Unbound Ed - Module 1)</u></p>	<p>Supplementary Resources:</p> <p>Eureka Math Homework Helpers & Parent Tip Sheets</p> <p>Zearn Online Interactive Platform</p> <p>Number Talks: Building Numerical Reasoning</p> <p>Sadlier Progress In Mathematics Online Resources - Grade 1</p>

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<p>Zearn.org</p>	<p><i>Sadlier Progress in Mathematics</i> Workbook <i>Excel Math</i> (Publisher: AnsMar) <i>Big Book of Elementary Communicator Classroom Templates</i> <i>Big Book of Elementary Math Communicator Templates</i> <i>Calendar Math</i> <i>Math Work Stations</i> <i>MathSeeds.com</i> Visual Patterns: Gr. K-12 Number Strings Common Core Progression Documents Performance Tasks are available for use from the following sites: Illustrative Mathematics Coherence Map Inside Mathematics Problems of the Month Grade 1 YouCubed Tasks</p>
Suggested Materials & Tools:	Suggested Tasks for Use During Unit
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number bonds</i> <input type="checkbox"/> <i>Addition charts</i> <input type="checkbox"/> <i>5-group cards</i> <input type="checkbox"/> Rekenrek - available as an online resource (<i>Slavonic abacus having beads with a color change at the five</i>) <input type="checkbox"/> <i>Counters</i> <input type="checkbox"/> <i>Number Path</i> <input type="checkbox"/> <i>Hide Zero cards</i> 	<ul style="list-style-type: none"> 1.OA.A.1 Sharing Markers 1.OA.B.3 Domino Addition 1.OA.B.3 Doubles? 1.OA.B.4 Cave Game Subtraction 1.OA.C.6 Making a Ten 1.OA.D.7 Equality Number Sentences 1.OA.D.7 Using Lengths to Represent Equality 1.OA.D.7 Valid Inequalities? 1.OA.D.8 Find the Missing Number 1.OA.D.8 Kiri's Mathematics Match Game
School/District Formative Assessment Plan	School/District Summative Assessment Plan
<ul style="list-style-type: none"> • Teacher observation of students engaged in group and independent activities. • Individual and small group conferences/interviews to assess understanding with rubric • Sprints • Self-assessment by students with guidance from teacher. • Exit tickets • Zearn Assessments & Teacher Reports 	<ul style="list-style-type: none"> • Teacher created assessments and projects • Eureka Math Mid- and End- Module Assessments (Constructed response item with rubric) • Teacher/District created benchmark assessments

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Instructional Best Practices and Exemplars	Mathematical Terms/Vocabulary
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number talks</i> <input type="checkbox"/> <i>Hands-on activities</i> <input type="checkbox"/> <i>Exploratory activities</i> <input type="checkbox"/> <i>Games/play</i> <input type="checkbox"/> <i>Using concrete materials to advance conceptual understanding</i> <input type="checkbox"/> <i>Use drawings and diagrams to advance conceptual understanding</i> <input type="checkbox"/> <i>Use of technology apps and programs to motivate and individualize instruction.</i> 	<ul style="list-style-type: none"> • Count on (count up from one addend to the total) • Track (use different objects to track the count on from one addend to the total) • Expression (e.g., $2 + 1$ or $5 - 3$) • Addend (one of the numbers being added) • Doubles (e.g., $3 + 3$ or $4 + 4$) • Doubles plus 1 (e.g., $3 + 4$ or $4 + 5$) • Number bond (see below) <div style="text-align: center;">  </div> <ul style="list-style-type: none"> • Number path (see below) <div style="text-align: center;">  </div>

Focus Mathematical Concepts

Grade Level Fluency Requirement: 1.OA.C.6: Add & subtract within 10.

Prerequisite skills

Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.

Coherence Map

K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

K.CC.4b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

K.CC.4c Understand that each successive number name refers to a quantity that is one larger.

K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).

K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

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K.OA.5 Fluently add and subtract within 5.

Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work
- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)

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- Extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Students at Risk of School Failure

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Unit 2: Introduction to Place Value Through Addition & Subtraction Within 20

(Approximate Instructional Time: 7 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 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, <i>e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</i> *(benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Symbols can be used to represent unknown numbers. The symbol (unknowns) can be in any position. <p>Students are able to:</p> <ul style="list-style-type: none"> add, using drawings and equations, to solve word problems involving situations of adding to and putting together. subtract, using drawings and equations, to solve word problems involving situations of taking from and taking apart. <p>Learning Goal 1: Use addition and subtraction <u>within 20</u> to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.</p>
<ul style="list-style-type: none"> 1.OA.D.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <i>For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s): True or false addition and subtraction equations</p> <p>Students are able to:</p> <ul style="list-style-type: none"> determine if addition equations are true or false determine if subtraction equations are true or false <p>Learning Goal 2: Determine if addition and subtraction equations, <u>within 20</u>, are true or false.</p>
<ul style="list-style-type: none"> 1.OA.D.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, 5</i> 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s): Solve addition and subtraction equations within 20</p> <p>Students are able to:</p> <ul style="list-style-type: none"> determine the unknown number that makes an equation true. solve addition or subtraction equations by finding the missing whole number.

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<p>$= _ - 3, 6 + 6 = _$. *(benchmarked)</p>		<p>Learning Goal 3: Solve addition and subtraction equations, <u>within 20</u>, by finding the missing whole number in any position.</p>
<ul style="list-style-type: none"> 1.OA.B.3. Apply properties of operations as strategies to add and subtract. <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i> <i>(Students need not use formal terms for these properties)</i> *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> When adding, the numbers need not be added in order. To add $2 + 6 + 4$, the second two numbers can be added first to make a ten. [e.g., $2 + 6 + 4 = 2 + 10 = 12$ (Associative Property)] <p>Students are able to:</p> <ul style="list-style-type: none"> add and subtract, within 20, using properties of operations as strategies. (Associative Property) <p>Learning Goal 4: Apply properties of operations as strategies (Associative Property) to add or subtract <u>within 20</u>.</p>
<ul style="list-style-type: none"> 1.OA.C.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as <u>counting on</u>; <u>making ten</u> (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); <u>decomposing a number leading to a ten</u> (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); <u>using the relationship between addition and subtraction</u> (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and <u>creating equivalent but easier or known sums</u> (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$). *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): Different strategies can be used to add and subtract.</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> add and subtract <u>within 20</u>, using the following strategies: <ul style="list-style-type: none"> counting on; making ten; composing numbers; decomposing numbers leading to a ten; relationship between addition and subtraction, and creating equivalent but easier or known sums. fluently add or subtract whole numbers <u>within 20</u>. <p>Learning Goal 5: Add and subtract whole numbers <u>within 20</u> using various strategies: counting on, making ten, composing, decomposing, relationship between addition and subtraction, creating equivalent but easier or known sums, etc.</p>
<ul style="list-style-type: none"> 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 	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Symbols can be used to represent unknown numbers. The symbol (unknowns) can be in any position. <p>Students are able to:</p> <ul style="list-style-type: none"> use <i>objects and drawings</i> to represent word problems that call for less than or equal to 20.

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	<p>MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Learning Goal 6: Solve addition word problems with three whole numbers with sums less than or equal to 20.</p>
<ul style="list-style-type: none"> ● 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: 1.NBT.B.2. a. 10 can be thought of as a bundle of ten ones — called a "ten." 1.NBT.B.2. b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. 	<p>MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Two digits represent amounts of tens and ones. ● 10 can be thought of as a bundle of ten ones — called a <i>ten</i>. <p>Students are able to:</p> <ul style="list-style-type: none"> ● compose numbers to 20. ● decompose numbers to 20. ● identify the value of the number in the tens or ones place. <p>Learning Goal 7: Compose and decompose numbers <u>to 20</u> to identify the value of the number in the tens and ones place.</p>
<ul style="list-style-type: none"> ● 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. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.7 Look for and make use of structure.</p>	<p>Concept(s): Finding 10 more or less without counting</p> <p>Students are able to:</p> <ul style="list-style-type: none"> ● given a two-digit number, find 10 more than the number without counting. ● given a two-digit number, find 10 less than the number without counting. ● explain, given a two-digit number, how to find 10 more or ten less than the number without counting. <p>Learning Goal 8: Explain, given a two-digit number, how to find 10 more or ten less than the number without having to count.</p>
<p><u>Interdisciplinary Connections:</u></p> <p><u>NGSS Appendix for Alignment</u></p>	<p><u>English-Language Arts:</u></p> <p>RI.1.1. Ask and answer questions about key details in a text. RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI.1.10. With prompting and support, read informational texts at grade level text complexity or above. RF.1.4. Read with sufficient accuracy and fluency to support comprehension. A. Read grade-level text with purpose and understanding. B. Read grade-level text orally with accuracy, appropriate rate, and expression.</p>	

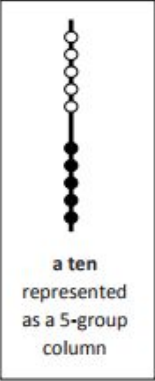
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	<p>C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p> <p>SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p> <p>SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p>
<p><u>21st Century Skills/ Career Ready Practices:</u></p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p><u>2014 NJ Technology Standards:</u></p>	<p>8.1 Educational Technology (Word PDF) All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word PDF) All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>Please see relevant projects for technology standards 8.1 and 8.2:</p>

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District/School Primary and Supplementary Resources	
<p>Primary Resource:</p> <p><u>Eureka Math (Unbound Ed - Module 2)</u></p> <p>Zearn.org</p>	<p>Supplementary Resources:</p> <p><u>Eureka Math Homework Helpers & Parent Tip Sheets</u></p> <p>Zearn Online Interactive Platform</p> <p><u>Number Talks: Building Numerical Reasoning</u></p> <p><u>Sadlier Progress In Mathematics Online Resources - Grade 1</u></p> <p><i>Sadlier Progress in Mathematics</i> Workbook</p> <p><i>Excel Math</i> (Publisher: AnsMar)</p> <p><i>Big Book of Elementary Communicator Classroom Templates</i></p> <p><i>Big Book of Elementary Math Communicator Templates</i></p> <p><i>Calendar Math</i></p> <p><i>Math Work Stations</i></p> <p><i>MathSeeds.com</i></p> <p><u>Visual Patterns: Gr. K-12</u></p> <p><u>Number Strings</u></p> <p><u>Common Core Progression Documents</u></p> <p>Performance Tasks are available for use from the following sites:</p> <p><u>Illustrative Mathematics</u></p> <p><u>Coherence Map</u></p> <p><u>Inside Mathematics Problems of the Month</u></p> <p><u>Grade 1 YouCubed Tasks</u></p>
Suggested Materials:	Suggested Tasks for Use During Unit
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number bonds</i> <input type="checkbox"/> <i>5-group formations: 5-groups (and 5-group cards), 5-group rows, 5-group column</i> <input type="checkbox"/> <u>Rekenrek</u> - available as an online resource (Slavonic abacus having beads with a color change at the five) <input type="checkbox"/> <i>Counters</i> <input type="checkbox"/> <i>Number Path</i> <input type="checkbox"/> <i>Hide Zero cards</i> 	<p><u>1.OA.A.1 School Supplies</u></p> <p><u>1.OA.A.2 Daisies in vases</u></p> <p><u>1.OA.B.3 Doubles?</u></p> <p><u>1.OA.C.6 \$20 Dot Map</u></p> <p><u>1.NBT.B.2 Roll & Build</u></p>

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School/District Formative Assessment Plan	School/District Summative Assessment Plan
<ul style="list-style-type: none"> ● Teacher observation of students engaged in group and independent activities. ● Individual and small group conferences/interviews to assess understanding with rubric ● Sprints ● Self-assessment by students with guidance from teacher. ● Zearn Assessments & Teacher Reports ● Exit tickets 	<ul style="list-style-type: none"> ● Teacher created assessments and projects ● <i>Eureka Math</i> Mid- and End- Module Assessments (Constructed response item with rubric) ● Teacher/District created benchmark assessments
Instructional Best Practices and Exemplars	Mathematical Terms/Vocabulary
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number talks</i> <input type="checkbox"/> <i>Hands-on activities</i> <input type="checkbox"/> <i>Exploratory activities</i> <input type="checkbox"/> <i>Games/play</i> <input type="checkbox"/> <i>Using concrete materials to advance conceptual understanding</i> <input type="checkbox"/> <i>Use drawings and diagrams to advance conceptual understanding</i> <input type="checkbox"/> <i>Use of technology apps and programs to motivate and individualize instruction.</i> 	<ul style="list-style-type: none"> ● A ten (a group, or unit, consisting of 10 items) ● Ones (individual units, 10 of which become a ten) <div style="text-align: right; margin-top: 20px;">  </div>
Focus Mathematical Concepts	
<p><u>Grade Level Fluency Requirement:</u> 1.OA.C.6: Add & subtract within 10.</p> <p><u>Prerequisite skills</u></p> <p><i>Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.</i></p> <p><u>Coherence Map</u></p> <p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p>	

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K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work
- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Extended time for assignment completion as needed
- Highlight key vocabulary

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- Use graphic organizers

Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Students at Risk of School Failure

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Unit 3: Ordering and Comparing Length Measurements as Numbers

(Approximate Instructional Time: 3 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 1.MD.A.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object 	<p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s): Objects can be compared and ordered based on length.</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> compare the length of two objects. compare the length of two objects by using a third object as a measuring tool. order three objects by length. <p>Learning Goal 1: Order three objects by length and compare the lengths of two objects by using the third object (e.g., if the crayon is shorter than the marker and the marker is shorter than the pencil then the crayon is shorter than the pencil).</p>
<ul style="list-style-type: none"> 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. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i> 	<p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s): The length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> lay multiple copies of a shorter object (the length unit) end to end. use a shorter object to express the length of a longer object. <p>Learning Goal 2: Order three objects by length and compare the lengths of two objects by using the third object (e.g., if the crayon is shorter than the marker and the marker is shorter than the pencil then the crayon is shorter than the pencil).</p>
<ul style="list-style-type: none"> 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 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p>Concept(s): Numbers can be organized to represent data.</p> <p>Students are able to:</p> <ul style="list-style-type: none"> organize objects, representing data, in up to three categories. represent data with objects, drawings, or numerals, in up to three categories.

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<p>less are in one category than in another.</p>	<p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p>	<ul style="list-style-type: none"> ● ask and answer questions about: <ul style="list-style-type: none"> - the total number of data points; - the number of data points in each category, and - how many more or less are in one category than in another. <p>Learning Goal 3: Organize, represent, and interpret data with up to three categories, compare the number of data points among the categories, and find the total number of data points.</p>
<ul style="list-style-type: none"> ● 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 $6 + 6 + 1 = 12 + 1 = 13$). *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.7 Look for and make use of structure.</p> <p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s): Comparison questions</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> ● Compare objects or data to find the difference <p>Learning Goal 4: Answer comparison questions using data and objects.</p>
<p>Interdisciplinary Connections:</p> <p>NGSS Appendix for Alignment</p>	<p>Science:</p> <p>1-PS4 Science example: The class makes string phones. Maria’s string is longer than Sue’s...Sue’s string is longer than Tia’s...so without measuring directly we know that Maria’s string is longer than Tia’s.(NON-STANDARD UNITS & INDIRECT MEASUREMENT) (1.MD.A.1)</p> <p>Using a shoe as the length unit, the string for Sue’s string phone is 11 units long. (1.MD.A.2)</p> <p>1-LS3 Science example: Every sunflower is taller than the ruler...every daisy is shorter than the ruler...so without measuring directly we know that every sunflower is taller than every daisy. The sunflowers and daisies are not exactly like the plants from which they grew, but they resemble the plants from which they grew in being generally tall or generally short. (1.MD.A.1)</p> <p>1.ESS1 Science example: Based on the data we have collected so far on the bulletin board, which day has been the longest of the year so far? Which day has been the shortest of the year so far? (NO PICTURE GRAPHS, BAR GRAPHS OR LINE PLOTS UNTIL GR. 2; NO COORDINATE PLANES UNTIL GR. 5)</p> <p>English-Language Arts:</p> <p>RI.1.1. Ask and answer questions about key details in a text.</p> <p>RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</p>	

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	<p>RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p> <p>RI.1.10. With prompting and support, read informational texts at grade level text complexity or above.</p> <p>RF.1.4. Read with sufficient accuracy and fluency to support comprehension.</p> <p>A. Read grade-level text with purpose and understanding.</p> <p>B. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p>
<p><u>21st Century Skills/ Career Ready Practices:</u></p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p><u>2014 NJ Technology Standards:</u></p>	<p>8.1 Educational Technology (Word PDF)</p> <p>All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word PDF)</p> <p>All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>Please see relevant projects for technology standards 8.1 and 8.2:</p>

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District/School Primary and Supplementary Resources	
<p>Primary Resource:</p> <p><u>Eureka Math (Unbound Ed - Module 3)</u></p>	<p>Supplementary Resources:</p> <p><u>Eureka Math Homework Helpers & Parent Tip Sheets</u></p> <p>Zearn Online Interactive Platform</p> <p><u>Number Talks: Building Numerical Reasoning</u></p> <p><u>Sadlier Progress In Mathematics Online Resources - Grade 1</u></p> <p><i>Sadlier Progress in Mathematics</i> Workbook</p> <p><i>Excel Math</i> (Publisher: AnsMar)</p> <p><i>Big Book of Elementary Communicator Classroom Templates</i></p> <p><i>Big Book of Elementary Math Communicator Templates</i></p> <p><i>Calendar Math</i></p> <p><i>Math Work Stations</i></p> <p><i>MathSeeds.com</i></p> <p><u>Visual Patterns: Gr. K-12</u></p> <p><u>Number Strings</u></p> <p><u>Common Core Progression Documents</u></p> <p>Performance Tasks are available for use from the following sites:</p> <p><u>Illustrative Mathematics</u></p> <p><u>Coherence Map</u></p> <p><u>Inside Mathematics Problems of the Month</u></p> <p><u>Grade 1 YouCubed Tasks</u></p>
Suggested Materials & Tools:	Suggested Tasks for Use During Unit
<ul style="list-style-type: none"> <input type="checkbox"/> Centimeter cubes <input type="checkbox"/> Centimeter rulers (simply for the purpose of naming the centimeter) <input type="checkbox"/> Non-standard units (toothpicks, small and large paper clips) <input type="checkbox"/> String lengths of about 25 centimeters <input type="checkbox"/> Tally marks 	<p><u>1.MD.A.2 Measure Me!</u></p> <p><u>1.MD.A.2 Measuring Blocks</u></p> <p><u>1.MD.A.2 Growing Bean Plants</u></p> <p><u>1.MD.C.4 Favorite Ice Cream</u></p> <p><u>1.MD.C.4 Weather Graph Data</u></p>
School/District Formative Assessment Plan	School/District Summative Assessment Plan

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<ul style="list-style-type: none"> ● Teacher observation of students engaged in group and independent activities. ● Individual and small group conferences/interviews to assess understanding with rubric ● Sprints ● Self-assessment by students with guidance from teacher. ● Exit tickets ● Zearn Assessments & Teacher Reports 	<ul style="list-style-type: none"> ● Teacher created assessments and projects ● <i>Eureka Math</i> Mid- and End- Module Assessments (Constructed response item with rubric) ● Teacher/District created benchmark assessments
Instructional Best Practices and Exemplars	Mathematical Terms/Vocabulary
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number talks</i> <input type="checkbox"/> <i>Hands-on activities</i> <input type="checkbox"/> <i>Exploratory activities</i> <input type="checkbox"/> <i>Games/play</i> <input type="checkbox"/> <i>Using concrete materials to advance conceptual understanding</i> <input type="checkbox"/> <i>Use drawings and diagrams to advance conceptual understanding</i> <input type="checkbox"/> <i>Use of technology apps and programs to motivate and individualize instruction.</i> 	<ul style="list-style-type: none"> ● Centimeter (standard length unit within the metric system) ● Centimeter cube (used as a length unit in this module) ● Centimeter ruler (measurement tool using length units of centimeters) ● Data (collected information) ● Endpoint (the end of an object, referenced when aligning for measurement purposes) ● Height (measurement of vertical distance of an object) ● Length unit (measuring the length of an object with equal-sized units) ● Poll (survey) ● Table or graph (organized charts visually representing data)
Focus Mathematical Concepts	
<p><u>Grade Level Fluency Requirement:</u> 1.OA.C.6: Add & subtract within 10.</p> <p><u>Prerequisite skills</u></p> <p><i>Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.</i></p> <p><u>Coherence Map</u></p> <p>K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.</p> <p>K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)</p> <p>K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.</p> <p>K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p> <p>K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p>	

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Instructional Best Practices and Exemplars

- Number talks*
- Hands-on activities*
- Exploratory activities*
- Games/play*
- Using concrete materials to advance conceptual understanding*
- Use drawings and diagrams to advance conceptual understanding*
- Use of technology apps and programs to motivate and individualize instruction.*

Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work

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- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

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Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

Students at Risk of School Failure

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
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- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions

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- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Unit 4: Place Value, Comparison, Addition & Subtraction to 40

(Approximate Instructional Time: 7 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 1.NBT.A.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. *(benchmarked) 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): Number names and the count sequence up to 120. Students are able to: <ul style="list-style-type: none"> count orally by ones <u>up to 120</u>. count up to 120 beginning at any number less than 120. read numerals up to 120. write numerals up to 120. represent a number of objects up to 120 with a written number. <p>Learning Goal 1: Count to 120 orally, read and write numerals, and write numerals to represent the number of objects (<u>up to 120</u>).</p>
<ul style="list-style-type: none"> 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: 1.NBT.B.2. a. 10 can be thought of as a bundle of ten ones — called a "ten." 1.NBT.B.2. b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> Two digits represent amounts of tens and ones. 10 can be thought of as a bundle of ten ones — called a <i>ten</i>. Students are able to: <ul style="list-style-type: none"> compose numbers to 20. decompose numbers to 20. identify the value of the number in the tens or ones place. <p>Learning Goal 2: Compose and decompose numbers <u>to 20</u> to identify the value of the number in the tens and ones place.</p>
<ul style="list-style-type: none"> 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. 	MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.7 Look for and make use of structure.	Concept(s): Finding 10 more or less without counting Students are able to: <ul style="list-style-type: none"> given a two-digit number, find 10 more than the number without counting. given a two-digit number, find 10 less than the number without counting.

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		<ul style="list-style-type: none"> explain, given a two-digit number, how to find 10 more or ten less than the number without counting. <p>Learning Goal 3: Explain, given a two-digit number, how to find 10 more or ten less than the number without having to count.</p>
<ul style="list-style-type: none"> 1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. 	<p>MP.2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Use place value understanding to compare two digit numbers. Comparing numbers using symbols. <p>Students are able to:</p> <ul style="list-style-type: none"> use the meaning of tens and ones digits to compare 2 two-digit numbers using $>$, $=$, and $<$ symbols. <p>Learning Goal 4: Use the meaning of tens and ones digits to record comparisons of 2 two-digit numbers using $>$, $=$, and $<$ symbols.</p>
<ul style="list-style-type: none"> 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. *(benchmarked) 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> In adding two-digit numbers, add tens with tens and ones with ones. In adding two-digit numbers, sometimes it is necessary to compose a ten. <p>Students are able to:</p> <ul style="list-style-type: none"> use concrete models and drawings with a strategy based on place value to add a two-digit number and a one-digit number. use concrete models and drawings with properties of operations to add a two-digit number and a one-digit number. use concrete models and drawings with a strategy based on place value to add a two-digit number and a multiple of 10. use concrete models and drawings with properties of operations to add a two-digit number and a multiple of 10. explain or show how the model relates to the strategy. <p>Learning Goal 5: Add a 2-digit and a 1-digit number using concrete models and drawings with a place value strategy or properties of operations; explain or show how the model relates to the strategy (sums within 40).</p> <p>Learning Goal 6: Add a 2-digit number and a multiple of 10, using concrete models and drawings with a place value strategy or properties of operations. Explain or show how the model relates to the strategy (sums within 40).</p>

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<ul style="list-style-type: none"> 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. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically MP.7 Look for and make use of structure.</p>	<p>Concept(s): Strategies with multiples of 10</p> <p>Students are able to:</p> <ul style="list-style-type: none"> use concrete models and drawings with a strategy based on place value to subtract a multiple of 10 from a multiple of 10 (both within the range 10-40). use concrete models and drawings with properties of operations to subtract a multiple of 10 from a multiple of 10 (both within the range 10-40). explain or show how the model relates to the strategy. <p>Learning Goal 7: Subtract a multiple of 10 from a multiple of 10 (both within the range 10-90) using concrete models and drawings with a place value strategy or properties of operations. Explain or show how the model relates to the strategy (sums within 40).</p>
<ul style="list-style-type: none"> 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, <i>e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</i> *(benchmarked) 	<p>MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Symbols can be used to represent unknown numbers. The symbol (unknowns) can be in any position. <p>Students are able to:</p> <ul style="list-style-type: none"> add, using objects and drawings, to solve word problems involving situations of adding to and putting together. subtract, using objects and drawings, to solve world problems involving situations of taking from and taking apart. <p>Learning Goal 8: Use addition and subtraction <u>within 20</u> to solve problems, including word problems involving situations of adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions.</p>
<p>Interdisciplinary Connections:</p> <p>NGSS Appendix for Alignment</p>	<p>Science: 1-LS1 Science examples: (1) A mother wolf spider is carrying 40 baby spiders on her back. There were 50 eggs in the egg sac. How many of the hatchlings is the spider not caring for? (2) During the breeding season, a female cottontail rabbit has litters of 5, 6, 5, and 4 bunnies. How many bunnies did the rabbit have during this time? (1.NBT.B3, C.4-6)</p> <p>English-Language Arts: RI.1.1. Ask and answer questions about key details in a text. RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p>	

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	<p>RI.1.10. With prompting and support, read informational texts at grade level text complexity or above.</p> <p>RF.1.4. Read with sufficient accuracy and fluency to support comprehension.</p> <p>A. Read grade-level text with purpose and understanding.</p> <p>B. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p>
<p><u>21st Century Skills/ Career Ready Practices:</u></p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p><u>2014 NJ Technology Standards:</u></p>	<p>8.1 Educational Technology (Word PDF)</p> <p>All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word PDF)</p> <p>All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>Please see relevant projects for technology standards 8.1 and 8.2:</p>

District/School Primary and Supplementary Resources	
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<p>Primary Resource:</p> <p><u>Eureka Math (Unbound Ed - Module 4)</u></p> <p>Zearn.org</p>	<p>Supplementary Resources:</p> <p><u>Eureka Math Homework Helpers & Parent Tip Sheets</u> Zearn Online Interactive Platform <u>Number Talks: Building Numerical Reasoning</u> <u>Sadlier Progress In Mathematics Online Resources - Grade 1</u> <i>Sadlier Progress in Mathematics</i> Workbook <i>Excel Math</i> (Publisher: AnsMar) <i>Big Book of Elementary Communicator Classroom Templates</i> <i>Big Book of Elementary Math Communicator Templates</i> <i>Calendar Math</i> <i>Math Work Stations</i> <i>MathSeeds.com</i> <u>Visual Patterns: Gr. K-12</u> <u>Number Strings</u> <u>Common Core Progression Documents</u></p> <p>Performance Tasks are available for use from the following sites:</p> <p><u>Illustrative Mathematics</u> <u>Coherence Map</u> <u>Inside Mathematics Problems of the Month</u> <u>Grade 1 YouCubed Tasks</u></p>
<p>Suggested Materials & Tools</p>	<p>Suggested Tasks for Use During Unit</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Arrow notation <input type="checkbox"/> Comparison symbols: >, <, = <input type="checkbox"/> Dime <input type="checkbox"/> Hide Zero cards <input type="checkbox"/> Hundred chart <input type="checkbox"/> Number bond <input type="checkbox"/> Penny <input type="checkbox"/> Place value chart <input type="checkbox"/> Quick Ten <input type="checkbox"/> <u>Rekenrek</u> - available as an online resource (Slavonic abacus having beads with a color change at the five) <input type="checkbox"/> Tape diagram 	<ul style="list-style-type: none"> <u>1.NBT.A.1 Where Do I Go?</u> <u>1.NBT.A.1 Hundred Chart Digit Game</u> <u>1.NBT.A.1 Start/Stop Counting 2</u> <u>1.NBT.B.3 Ordering Numbers</u> <u>1.NBT.C.4 Ford and Logan Add 45+36</u> <u>1.NBT.C.5 Number Square</u>

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School/District Formative Assessment Plan	School/District Summative Assessment Plan
<ul style="list-style-type: none"> ● Teacher observation of students engaged in group and independent activities. ● Individual and small group conferences/interviews to assess understanding with rubric ● Sprints ● Self-assessment by students with guidance from teacher. ● Exit tickets ● Zearn Assessments & Teacher Reports 	<ul style="list-style-type: none"> ● Teacher created assessments and projects ● <i>Eureka Math</i> Mid- and End- Module Assessments (Constructed response item with rubric) ● Teacher/District created benchmark assessments
Instructional Best Practices and Exemplars	Mathematical Terms/Vocabulary
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number talks</i> <input type="checkbox"/> <i>Hands-on activities</i> <input type="checkbox"/> <i>Exploratory activities</i> <input type="checkbox"/> <i>Games/play</i> <input type="checkbox"/> <i>Using concrete materials to advance conceptual understanding</i> <input type="checkbox"/> <i>Use drawings and diagrams to advance conceptual understanding</i> <input type="checkbox"/> <i>Use of technology apps and programs to motivate and individualize instruction.</i> 	<ul style="list-style-type: none"> ● > (greater than) ● < (less than) ● Place value (quantity represented by a digit in a particular place within a number) ● = (equal)
Focus Mathematical Concepts	
<p><u>Grade Level Fluency Requirement:</u> 1.OA.C.6: Add & subtract within 10.</p> <p><u>Prerequisite skills</u></p> <p><i>Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.</i></p> <p><u>Coherence Map</u></p> <p>K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).</p> <p>K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.</p> <p>K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>	

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Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work
- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

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Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

Students at Risk of School Failure

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Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
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Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
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Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
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- Establish procedures for accommodations / modifications for assessments.

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Unit 5: Identifying, Composing & Partitioning Shapes

(Approximate Instructional Time: 3 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 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. 	MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.7 Look for and make use of structure.	Concept(s): Defining attributes versus non defining attributes. Students are able to: <ul style="list-style-type: none"> name attributes that define two-dimensional shapes (square, triangle, rectangle, regular hexagon). name attributes that do not two-dimensional shapes. build and draw shapes when given defining attributes. <p>Learning Goal 1: Name the attributes of a given two-dimensional shape (square, triangle, rectangle, regular hexagon), distinguishing between defining and non-defining attributes.</p> <p>Learning Goal 2: Build and draw shapes when given defining attributes.</p>
<ul style="list-style-type: none"> 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. 	MP.4 Model with mathematics. MP.7 Look for and make use of structure.	Concept(s): <ul style="list-style-type: none"> Shapes can be composed from other shapes (e.g. trapezoids can be composed from triangles). New shapes can be composed from composite shapes. Students are able to: <ul style="list-style-type: none"> create a composite shape using two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles). create a composite shape using three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders). compose <i>new</i> shapes from the <i>composite</i> shapes. <p>Learning Goal 3: Create a composite shape by composing two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles and quarter circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular</p>

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		<p style="text-align: center;">cones, and right circular cylinders), and compose new shapes from the composite shape.</p>
<ul style="list-style-type: none"> ● 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 	<p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.6 Attend to precision.</p> <p>MP.4 Model with mathematics.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Shapes can be partitioned into equal parts or shares. ● Equal shares are named based on the number of shares that make the whole (e.g. halves, fourths, quarters). ● Shares can be described based on their relation to the whole (e.g. <i>half of</i>, <i>fourth of</i>, <i>quarter of</i>). ● The whole can be described based on the number of shares. ● Decomposing a whole into more equal shares creates smaller shares. <p>Students are able to:</p> <ul style="list-style-type: none"> ● partition circles and rectangles into two or four equal shares. ● distinguish equal shares from those that are not equal. ● describe shares using the words halves, fourths, and quarters. ● describe the relationship between the whole and the share using the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. ● describe the whole as <i>two of</i>, or <i>four of</i> the shares. ● decompose a whole into a greater number of equal shares and identify the new shares as smaller. <p>Learning Goal 4: Partition circles and rectangles into two or four equal shares, describing the shares using halves, fourths, and quarters and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole circle (or rectangle) partitioned into two or four equal shares as <i>two of</i>, or <i>four of</i> the shares.</p>
<ul style="list-style-type: none"> ● 1.MD.B.3. Tell and write time in hours and half-hours using analog and digital clocks 	<p>MP.6 Attend to precision.</p> <p>MP.7 Look for and make use of structure.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> ● Time is represented on analog and on digital clocks. ● Analog clocks have <i>hands</i> that indicate the time in hours and minutes. <p>Students are able to:</p> <ul style="list-style-type: none"> ● tell and write time in hours using analog and digital clocks. ● tell and write time in half-hours using analog and digital clocks. ● use the term <i>o'clock</i> in reporting time to the hour. <p>Learning Goal 5: Tell and write time to the half-hour using the term <i>o'clock</i> and using digital notation (include both analog and digital clocks).</p>

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<p>Interdisciplinary Connections:</p> <p>NGSS Appendix for Alignment</p>	<p><i>English-Language Arts:</i></p> <p>RI.1.1. Ask and answer questions about key details in a text.</p> <p>RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</p> <p>RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p> <p>RI.1.10. With prompting and support, read informational texts at grade level text complexity or above.</p> <p>RF.1.4. Read with sufficient accuracy and fluency to support comprehension.</p> <p>A. Read grade-level text with purpose and understanding.</p> <p>B. Read grade-level text orally with accuracy, appropriate rate, and expression.</p> <p>C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p> <p>SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p> <p>SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p>
<p>21st Century Skills/ Career Ready Practices:</p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p>2014 NJ Technology Standards:</p>	<p>8.1 Educational Technology (Word PDF)</p> <p>All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming</p>

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([Word](#) | [PDF](#))

All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.

Please see relevant projects for technology standards [8.1](#) and [8.2](#):

District/School Primary and Supplementary Resources	
Primary Resource: Eureka Math (Unbound Ed - Module 5) Zearn.org	Supplementary Resources: Eureka Math Homework Helpers & Parent Tip Sheets Zearn Online Interactive Platform Number Talks: Building Numerical Reasoning Sadlier Progress In Mathematics Online Resources - Grade 1 <i>Sadlier Progress in Mathematics</i> Workbook <i>Excel Math</i> (Publisher: AnsMar) <i>Big Book of Elementary Communicator Classroom Templates</i> <i>Big Book of Elementary Math Communicator Templates</i> <i>Calendar Math</i> <i>Math Work Stations</i> <i>MathSeeds.com</i> Visual Patterns: Gr. K-12 Number Strings Common Core Progression Documents Performance Tasks are available for use from the following sites: Illustrative Mathematics Coherence Map Inside Mathematics Problems of the Month Grade 1 YouCubed Tasks
Suggested Materials:	Suggested Tasks for Use During Unit
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Pattern blocks</i> <input type="checkbox"/> <i>Square tiles</i> <input type="checkbox"/> <i>Straws</i> <input type="checkbox"/> <i>Student clocks, preferably with gears that can provide the appropriate hour-hand alignment</i> <input type="checkbox"/> <i>Three-dimensional shape models (commercially produced or commonly found examples) including cube, cone, cylinder, rectangular prism, and sphere</i> 	1.MD.B Making a clock 1.G.A.1 All vs. Only some 1.G.A.1 3-D Shape Sort 1.G.A.2 Make Your Own Puzzle 1.G.A.2 Overlapping Rectangles 1.G.A.3 Equal Shares

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School/District Formative Assessment Plan	School/District Summative Assessment Plan
<ul style="list-style-type: none"> ● Teacher observation of students engaged in group and independent activities. ● Individual and small group conferences/interviews to assess understanding with rubric ● Sprints ● Self-assessment by students with guidance from teacher. ● Exit tickets. ● Zearn Assessments & Teacher Reports 	<ul style="list-style-type: none"> ● Teacher created assessments and projects ● <i>Eureka Math</i> Mid- and End- Module Assessments (Constructed response item with rubric) ● Teacher/District created benchmark assessments
Instructional Best Practices and Exemplars	Mathematical Terms/Vocabulary
<ul style="list-style-type: none"> <input type="checkbox"/> <i>Number talks</i> <input type="checkbox"/> <i>Hands-on activities</i> <input type="checkbox"/> <i>Exploratory activities</i> <input type="checkbox"/> <i>Games/play</i> <input type="checkbox"/> <i>Using concrete materials to advance conceptual understanding</i> <input type="checkbox"/> <i>Use drawings and diagrams to advance conceptual understanding</i> <input type="checkbox"/> <i>Use of technology apps and programs to motivate and individualize instruction.</i> 	<ul style="list-style-type: none"> ● Attributes (characteristics of an object such as color or number of sides) ● Composite shapes (shapes composed of two or more shapes) ● Digital clock ● Fourth of (shapes), ● fourths (1 out of 4 equal parts) ● Half-hour (interval of time lasting 30 minutes) ● Half of, halves (1 out of 2 equal parts) ● Half past (expression for 30 minutes past a given hour) ● Hour (unit for measuring time, equivalent to 60 minutes or 1/24 of a day) ● Hour hand (component on clock tracking hours) ● Minute (unit for measuring time, equivalent to 60 seconds or 1/60 of an hour) ● Minute hand (component on clock tracking minutes) ● O'clock (used to indicate time to a precise hour, with no additional minutes) ● Quarter of (shapes) (1 out of 4 equal parts) ● Three-dimensional shapes: <ul style="list-style-type: none"> ○ Cone ○ Rectangular prism ● Two-dimensional shapes: <ul style="list-style-type: none"> ○ Half-circle ○ Quarter-circle ○ Rhombus (flat figure enclosed by four straight sides of the same length wherein two pairs of opposite sides are parallel) ○ Trapezoid (a quadrilateral in which at least one pair of opposite sides is parallel) <i>Note: This is the formal definition that students learn in Grade 4. It is placed here to signify to teachers the precise definition used in later grades and is not required to be shared with</i>

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students now. Descriptive explanations such as, "This is a trapezoid. What are its interesting features?" are the general expectation for Grades 1 and 2

Focus Mathematical Concepts

Grade Level Fluency Requirement: 1.OA.C.6: Add & subtract within 10.

Prerequisite skills

Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.

Coherence Map

K.G.2 Correctly name shapes regardless of their orientations or overall size.

K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/”corners”) and other attributes (e.g., having sides of equal length).

K.G.6 Compose simple shapes to form larger shapes. For example, “*Can you join these two triangles with full sides touching to make a rectangle?*”

Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

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English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work
- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting

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- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

Students at Risk of School Failure

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily

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- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

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Unit 6: Place Value, Comparison, Addition & Subtraction to 100

(Approximate Instructional Time: 7 weeks)

NJ Student Learning Standards	Suggested Standards for Mathematical Practice	Critical Knowledge & Skills <i>(Learning goals are for the Unit but may not necessarily be in sequential order.)</i>
<ul style="list-style-type: none"> 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, <i>e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</i> *(benchmarked) 	MP.1 Make sense of problems and persevere in solving them. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> solve <i>compare with difference unknown</i> problem types solve <i>compare with bigger or smaller unknown</i> problem types Students are able to: <ul style="list-style-type: none"> use double-tape diagrams to solve comparison problems Learning Goal 1: Demonstrate <u>fluency</u> of addition and subtraction within 20.
<ul style="list-style-type: none"> 1.NBT.A.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. *(benchmarked) 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> Number names and the count sequence up to 120. Students are able to: <ul style="list-style-type: none"> count orally by ones <u>up to 120</u>. count up to 120 beginning at any number less than 120. read numerals up to 120. write numerals up to 120. represent a number of objects up to 120 with a written number. Learning Goal 2: Count to 120 orally, read and write numerals, and write numerals to represent the number of objects (<u>up to 120</u>).
<ul style="list-style-type: none"> 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: 1.NBT.B.2. a. 10 can be thought of as a bundle of ten 	MP.2 Reason abstractly and quantitatively. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.	Concept(s): <ul style="list-style-type: none"> Two digits represent amounts of tens and ones. 10 can be thought of as a bundle of ten ones — called a <i>ten</i>. Students are able to: <ul style="list-style-type: none"> compose numbers to 20. decompose numbers to 20.

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<p>ones — called a "ten." 1.NBT.B.2. b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</p>		<ul style="list-style-type: none"> identify the value of the number in the tens or ones place. <p>Learning Goal 3: Compose and decompose numbers <u>to 20</u> to identify the value of the number in the tens and ones place.</p>
<ul style="list-style-type: none"> 1.NBT.B.3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. 	<p>MP.2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> Use place value understanding to compare two digit numbers. Comparing numbers using symbols. <p>Students are able to:</p> <ul style="list-style-type: none"> use the meaning of tens and ones digits to compare 2 two-digit numbers using $>$, $=$, and $<$ symbols. <p>Learning Goal 4: Use the meaning of tens and ones digits to record comparisons of 2 two-digit numbers using $>$, $=$, and $<$ symbols.</p>
<ul style="list-style-type: none"> 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. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.7 Look for and make use of structure.</p>	<p>Concept(s): Finding 10 more or less</p> <p>Students are able to:</p> <ul style="list-style-type: none"> given a two-digit number, find 10 more than the number without counting. given a two-digit number, find 10 less than the number without counting. explain, given a two-digit number, how to find 10 more or ten less than the number without counting. <p>Learning Goal 5: Explain, given a two-digit number, how to find 10 more or ten less than the number without having to count.</p>
<ul style="list-style-type: none"> 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 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Concept(s):</p> <ul style="list-style-type: none"> In adding two-digit numbers, add tens with tens and ones with ones. In adding two-digit numbers, sometimes it is necessary to compose a ten. <p>Students are able to:</p> <ul style="list-style-type: none"> use place value understanding to add to 100. <p>Learning Goal 6: Add a 2-digit and a 1-digit number using concrete models and drawings with a place value strategy or properties of operations; explain or show how the model relates to the strategy (sums within 100).</p> <p>Learning Goal 7: Add a 2-digit number and a multiple of 10, using concrete models and drawings with a place value strategy or properties of operations. Explain or</p>

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<p>two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. *(benchmarked)</p>		<p style="text-align: center;">show how the model relates to the strategy (sums within 100).</p>
<ul style="list-style-type: none"> 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. 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically MP.7 Look for and make use of structure.</p>	<p>Concept(s): Subtraction strategies</p> <p>Students are able to:</p> <ul style="list-style-type: none"> use concrete models and drawings with a strategy based on place value to subtract a multiple of 10 from a multiple of 10 (both within the range 10-90). use concrete models and drawings with properties of operations to subtract a multiple of 10 from a multiple of 10 (both within the range 10-90). explain or show how the model relates to the strategy. <p>Learning Goal 8: Subtract a multiple of 10 from a multiple of 10 (both within the range 10-90) using concrete models and drawings with a place value strategy or properties of operations. Explain or show how the model relates to the strategy (sums within 100).</p>
<ul style="list-style-type: none"> 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 	<p>MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically MP.7 Look for and make use of structure</p>	<p>Concept: Coin value</p> <p>Students are able to:</p> <ul style="list-style-type: none"> identify pennies, nickels, dimes & quarters by image, name or value decompose the values of coins using other coins count on pennies from any single coin use dimes & pennies as representations of numbers to 120 <p>Learning Goal 9: Use coins as objects to count to 120 .</p>
<p><u>Interdisciplinary Connections:</u></p> <p><u>NGSS Appendix for Alignment</u></p>	<p><u>English-Language Arts:</u></p> <p>RI.1.1. Ask and answer questions about key details in a text. RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI.1.10. With prompting and support, read informational texts at grade level text complexity or above. RF.1.4. Read with sufficient accuracy and fluency to support comprehension. A. Read grade-level text with purpose and understanding. B. Read grade-level text orally with accuracy, appropriate rate, and expression. C. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p>	

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	<p>W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.</p> <p>SL.1.1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.</p> <p>A. Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).</p> <p>B. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>C. Ask questions to clear up any confusion about the topics and texts under discussion.</p> <p>SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p> <p>SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p>
<p><u>21st Century Skills/ Career Ready Practices:</u></p>	<p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>
<p><u>2014 NJ Technology Standards:</u></p>	<p>8.1 Educational Technology (Word PDF)</p> <p>All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.</p> <p>8.2 Technology Education, Engineering, Design and Computational Thinking - Programming (Word PDF)</p> <p>All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>Please see relevant projects for technology standards 8.1 and 8.2:</p>

District/School Primary and Supplementary Resources	
Primary Resource:	Supplementary Resources: Eureka Math Homework Helpers & Parent Tip Sheets

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<p><u>Eureka Math (Unbound Ed - Module 6)</u></p> <p>Zearn.org</p>	<p>Zearn Online Interactive Platform Number Talks: Building Numerical Reasoning Sadlier Progress In Mathematics Online Resources - Grade 1 <i>Sadlier Progress in Mathematics</i> Workbook <i>Excel Math</i> (Publisher: AnsMar) <i>Big Book of Elementary Communicator Classroom Templates</i> <i>Big Book of Elementary Math Communicator Templates</i> <i>Calendar Math</i> <i>Math Work Stations</i> <i>MathSeeds.com</i> Visual Patterns: Gr. K-12 Number Strings Common Core Progression Documents Performance Tasks are available for use from the following sites: Illustrative Mathematics Coherence Map Inside Mathematics Problems of the Month Grade 1 YouCubed Tasks</p>
<p>Suggested Materials:</p>	<p>Suggested Tasks for Use During Unit</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Rekenrek - available as an online resource (Slavonic abacus having beads with a color change at the five - increase to show 100) <input type="checkbox"/> Tape diagram 	<p>1.OA & 1.NBT The Very Hungry Caterpillar 1.OA.A.1 Twenty Tickets</p>
<p>School/District Formative Assessment Plan</p>	<p>School/District Summative Assessment Plan</p>
<ul style="list-style-type: none"> ● Teacher observation of students engaged in group and independent activities. ● Individual and small group conferences/interviews to assess understanding with rubric ● Sprints ● Self-assessment by students with guidance from teacher. ● Exit tickets ● Zearn Assessments & Teacher Reports 	<ul style="list-style-type: none"> ● Teacher created assessments and projects ● <i>Eureka Math</i> Mid- and End- Module Assessments (Constructed response item with rubric) ● Teacher/District created benchmark assessments ● Mammoth Math Gr. 1 End of Year Procedural Assessment ● Mammoth Math Gr. 1 End of Year Procedural Assessment Answer Key
<p>Instructional Best Practices and Exemplars</p>	<p>Mathematical Terms/Vocabulary</p>
<ul style="list-style-type: none"> <input type="checkbox"/> Number talks 	<ul style="list-style-type: none"> ● Comparison problem type

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- Hands-on activities
- Exploratory activities
- Games/play
- Using concrete materials to advance conceptual understanding
- Use drawings and diagrams to advance conceptual understanding
- Use of technology apps and programs to motivate and individualize instruction.

- Dime
- Nickel
- Penny
- Quarter

Focus Mathematical Concepts

Grade Level Fluency Requirement: 1.OA.C.6: Add & subtract within 10.

Prerequisite skills

Refer to Achieve the Core Coherence Map for full detail on vertical and horizontal alignment to prerequisite skills & future skills.

Coherence Map

K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).

K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Differentiation/Accommodations/Modifications

Gifted and Talented

(content, process, product and learning environment)

Extension Activities

- Conduct research and provide presentation of various topics.
- Design surveys to generate and analyze data to be used in discussion.
- Debate topics of interest / cultural importance.
- Authentic listening and reading sources that provide data and support for speaking and writing prompts.
- Exploration of art and/or artists to understand society and history.
- Implement RAFT Activities as they pertain to the types / modes of communication (role, audience, format, topic).

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Anchor Activities

- Use of Higher Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice.
- Model skills/techniques that need to be mastered.
- Extended time to complete class work
- Visual dictionaries to help build vocabulary
- Provide copy of classnotes
- Pair with a peer for assistance during class

Modifications for Homework/Assignments

- Modified Assignments
- Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

Students with Disabilities

(appropriate accommodations, instructional adaptations, and/or modifications as determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work

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- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.
- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.

Students at Risk of School Failure

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Repetition and practice
- Model skills / techniques to be mastered.
- Extended time to complete class work
- Provide copy of classnotes
- Preferential seating to be mutually determined by the student and teacher
- Student may request to use a computer to complete assignments.
- Establish expectations for correct spelling on assignments.
- Extra textbooks for home.

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- Student may request books on tape / CD / digital media, as available and appropriate.
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long and short term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/ school communication
- Teachers will check/sign student agenda daily
- Student requires use of other assistive technology device

Modifications for Homework and Assignments

- Extended time to complete assignments.
- Student requires more complex assignments to be broken up and explained in smaller units, with work to be submitted in phases.
- Provide the student with clearly stated (written) expectations and grading criteria for assignments.
- Implement RAFT activities as they pertain to the types / modes of communication (role, audience, format, topic).

Modifications for Assessments

- Extended time on classroom tests and quizzes.
- Student may take/complete tests in an alternate setting as needed.
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests.
- Establish procedures for accommodations / modifications for assessments.