# Lebanon Borough Public School Math <br> Curriculum Guide Grades K-6 



For adoption by all regular education program specified and for adoption or adaptation by all Special Education Programs in accordance with Board of Education Policy \#2200

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| Kindergarten- Mathematics <br> Pacing Guide |  |  |  |  |  |  |  |
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| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |  |  |  |  |  |


| Mathematics |  | Grade Kindergarten |
| :---: | :---: | :---: |
| Unit 1 | Count Sequence and Numbers to 5 | 32-34 days |
| Essential Question | How can students represent a number in different ways? How can students count t0 120? How can students read and write numerals and represent a number of objects with a written numeral? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| K.GA. 2 Name shapes <br> (2-Dimensional) <br> K.GA. 1 Describe where objects are located <br> K.OA.A. 2 Use objects or pictures to show your problems K.OA.A. 1 Add and subtract in many ways <br> K.CC.C. 6 Tell if a group is greater than, less than or equal to another group <br> K.CC.B. 5 Count up to 10 objects K.CC.B.4c Understand as they count, the next number is one more | - Module 1: Represent Numbers to 5 with Objects <br> - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. <br> - 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. <br> - Understand that the last number name says the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. <br> - Decompose numbers less than or equal to 10 into pairs in | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1, 2, 3, 4, 5 and 6 <br> Summative <br> - Module Tests 1, 2, 3, 4, 5, and 6 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment |

K.CC.B.4b Understand the last number they say is how many objects they counted K.CC.B.4a Count objects one by one and say the number names in order
K.CC.A. 3 Count and write numbers 0-10
K.CC.A. 1 Count to 50 by 1 s
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 $5=4+1$ ).

- Module 2: Represent Numbers to 5 with a Written Numeral
- Write numbers from 0 to 20 . Represent a number of objects with a written numeral $0-20$ (with 0 representing a count of no objects).
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Understand that the last number name says the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. Lesson 2.5 Count and Order to 5
- Understand that each successive number name refers to a quantity that is one larger.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Module 3: Matching and Counting Numbers to 5
- 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.
- Compare two numbers between 1 and 10 presented as written numerals.
- Module 4: Classify, Count, and Sort Objects
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
- Module 5: Add To and Take From Within 5
- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- Freckle BOY Benchmark

Alternative

- Unit 1 Performance Task after Module 6
- See also integrated and modifications appendix

|  | - Fluently add and subtract within 5. <br> - Module 6: Put Together and Take Apart Within 5 <br> - Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. <br> - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. <br> - Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. <br> - Fluently add and subtract within 5. |
| :---: | :---: |


| Mathematics |  | Grade Kindergarten |
| :---: | :---: | :---: |
| Unit 2 | Count Sequence and Numbers to 10 | 26-28 days |
| Essential Question | How can students show 5-10 objects? How can students represent a number in different ways? How can students count t0 120 ? How can students read and write numerals and represent a number of objects with a written numeral? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| K.GA. 2 Name shapes <br> (2-Dimensional) <br> K.GA. 1 Describe where objects are located K.OA.A. 2 Use objects or pictures to show your problems K.OA.A. 1 Add and subtract in many ways <br> K.CC.C. 6 Tell if a group is greater than, less than or equal to | - Module 7: Represent Numbers 6 to 10 with Objects <br> - When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. <br> - 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 | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 7, 8, 9, $10,11,12$, and 13 <br> Summative |

## another group

K.CC.B. 5 Count up to 10 objects K.CC.B.4c Understand as they count, the next number is one more
K.CC.B.4b Understand the last number they say is how many objects they counted
K.CC.B.4a Count objects one by one and say the number names in order
K.CC.A. 3 Count and write
numbers 0-10
K.CC.A. 1 Count to 50 by 1 s
K.CC.A. 1 Count to 100 by 1 s and count to 100 by 10s
K.CC.A. 3 Count and write
numbers 0-15
K.CC.B.4a Count objects one by one and say the number names in order
K.CC.B.4b Understand the last number they say is how many objects they counted
K.CC.B.4c Understand as they count, the next number is one more
K.CC.B. 5 Count up to 15 objects K.CC.C. 6 Tell if a group is greater than, less than or equal to
another group
K.CC.C. 7 Compare two numbers between 1 and 10
K.OA.A. 3 Show different ways to make a number that is less than or equal to 10
K.OA.A. 4 Add numbers to make 10
K.OA.A. 5 Add and subtract with

- Module 8: Represent Numbers 6 to 10 with a Written Numeral
- Write numbers from 0 to 20 . Represent a number of objects with a written numeral $0-20$ (with 0 representing a count of no objects).
- Understand that the last number name says the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Understand that each successive number name refers to a quantity that is one larger.
- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Module 9: Use the Count Sequence to Count to 100
- Count to 100 by ones and by tens.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1 ).
- Module 10: Compare Numbers to 10
- Understand that each successive number name refers to a quantity that is one larger.
- 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.
- Compare two numbers between 1 and 10 presented as written numerals.
- Module 11: Add To and Take From Within 10
- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- Module 12: Put Together and Take Apart Within 10
- Module Tests 7, 8, 9, 10, 11, 12, and 13 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark


## Alternative

- Unit 2 Performance Task after Module 13
- See also integrated and modifications appendix

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numbers 0-5
K.G.A. }2\mathrm{ Name shapes
(2-Dimensional) *if needed
K.G.A. }3\mathrm{ Describe shapes as flat
or solid
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- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems, and add
and subtract within 10, e.g., by using objects or drawings
- Solve addition and subtraction word problems, and add
and subtract within 10, e.g., by using objects or drawings to represent the problem
- Module 13: Ways to Make Numbers to 10
- Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, 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 $5=4+1$ ).
- Understand that the last number name says the number
of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- 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. (e.g., $5=2+3$ and $5=4+1$ ).

| Mathematics |  | Grade Kindergarten |
| :---: | :---: | :---: |
| Unit 3 | Geometry | 22-24 days |
| Essential Question | How can students distinguish between defining attributes versus non- defining attributes of shapes? How can students build and draw shapes to possess defining attributes? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| K.GA. 2 Name shapes <br> (2-Dimensional) <br> K.GA. 1 Describe where objects are located <br> K.OA.A. 2 Use objects or pictures to show your problems K.OA.A. 1 Add and subtract in | - Module 14: Analyze and Compare Three-Dimensional Shapes <br> - Correctly name shapes regardless of their orientations or overall size. <br> - Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). <br> - Analyze and compare two- and three-dimensional | Include formative, summative, benchmark and alternative Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) |

## many ways

K.CC.C. 6 Tell if a group is greater than, less than or equal to another group K.CC.B. 5 Count up to 10 objects K.CC.B.4c Understand as they count, the next number is one more
K.CC.B.4b Understand the last number they say is how many objects they counted
K.CC.B.4a Count objects one by one and say the number names in order
K.CC.A. 3 Count and write numbers 0-10
K.CC.A. 1 Count to 50 by 1 s
K.CC.A. 1 Count to 100 by 1s and
count to 100 by 10s
K.CC.A. 3 Count and write
numbers 0-15
K.CC.B.4a Count objects one by one and say the number names in order
K.CC.B.4b Understand the last number they say is how many objects they counted K.CC.B.4c Understand as they count, the next number is one more
K.CC.B. 5 Count up to 15 objects K.CC.C. 6 Tell if a group is greater than, less than or equal to another group
K.CC.C. 7 Compare two numbers between 1 and 10
K.OA.A. 3 Show different ways to make a number that is less than or equal to 10
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).

- Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- Module 15: Describe Positions of Objects
- Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- Module 16: Analyze and Compare Two-Dimensional Shapes
- Correctly name shapes regardless of their orientation or overall size.
- 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).
- Compose simple shapes to form larger shapes
- Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
- 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).
- Module Reviews 14, 15, and 16

Summative

- Module Tests 14,15 , and 16 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark

Alternative

- Unit 3 Performance Task after Module 16
See also integrated and modifications appendixas appropriate.

| K.OA.A.4 Add numbers to make |  |  |
| :--- | :--- | :--- |
| 10 |  |  |
| K.OA.A.5 Add and subtract with |  |  |
| numbers 0-5 |  |  |
| K.G.A.2 Name shapes |  |  |
| (2-Dimensional) *if needed |  |  |
| K.G.A.3 Describe shapes as flat |  |  |
| or solid |  |  |


| Mathematics |  | Grade Kindergarten |
| :---: | :---: | :---: |
| Unit 4 | Number and Operations in Base 10 | 18-20 days |
| Essential Question | How can students decompose numbers to 19 into tens and ones and more ones? How can students read and write numerals and represent a number of objects with a written numeral? How can students understand that the two digits of a two-digit number represent amounts of tens and ones? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| K.GA. 2 Name shapes <br> (2-Dimensional) <br> K.GA. 1 Describe where objects are located <br> K.OA.A. 2 Use objects or pictures to show your problems K.OA.A. 1 Add and subtract in many ways <br> K.CC.C. 6 Tell if a group is greater than, less than or equal to another group <br> K.CC.B. 5 Count up to 10 objects K.CC.B.4c Understand as they count, the next number is one more | - Module 17: Place Value Foundations: Represent Numbers to 20 <br> Understand that the last number name says the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. <br> - 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. <br> - 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 | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 17 and 18 <br> Summative <br> - Module Tests 17 and 18 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |

K.CC.B.4b Understand the last number they say is how many objects they counted K.CC.B.4a Count objects one by one and say the number names in order
K.CC.A. 3 Count and write numbers 0-10
K.CC.A. 1 Count to 50 by 1s
K.CC.A. 1 Count to 100 by 1 s and count to 100 by 10s
K.CC.A. 3 Count and write numbers 0-15
K.CC.B.4a Count objects one by one and say the number names in order
K.CC.B.4b Understand the last number they say is how many objects they counted K.CC.B.4c Understand as they count, the next number is one more
K.CC.B. 5 Count up to 15 objects K.CC.C. 6 Tell if a group is greater than, less than or equal to another group
K.CC.C. 7 Compare two numbers between 1 and 10
K.OA.A. 3 Show different ways to make a number that is less than or equal to 10
K.OA.A. 4 Add numbers to make 10
K.OA.A. 5 Add and subtract with numbers 0-5
K.G.A. 2 Name shapes
(2-Dimensional) *if needed
K.G.A. 3 Describe shapes as flat or solid
that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

- Module 18: Place Value Foundations: Represent Numbers to 20 with a Written Numeral
- 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.
- Write numbers from 0 to 20 . Represent a number of objects with a written numeral $0-20$ (with 0 representing a count of no objects).
- 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.


## Alternative

- Unit 4 Performance Task after Module 18
- See also integrated and modifications appendix

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| Mathematics |  | Grade Kindergarten |
| :---: | :---: | :---: |
| Unit 5 | Measurement | 16-18 days |
| Essential Question | How can students order objects by length? How can students compare the length of two objects using the length of a third object? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| K.GA. 2 Name shapes <br> (2-Dimensional) <br> K.GA. 1 Describe where objects are located <br> K.OA.A. 2 Use objects or pictures to show your problems K.OA.A. 1 Add and subtract in many ways <br> K.CC.C. 6 Tell if a group is greater than, less than or equal to another group <br> K.CC.B. 5 Count up to 10 objects K.CC.B.4c Understand as they count, the next number is one more <br> K.CC.B.4b Understand the last number they say is how many objects they counted K.CC.B.4a Count objects one by one and say the number names in order <br> K.CC.A. 3 Count and write numbers 0-10 <br> K.CC.A. 1 Count to 50 by 1 s <br> K.CC.A. 1 Count to 100 by 1 s and count to 100 by 10 s | - Module 19: Length and Height <br> - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <br> - 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. <br> - Module 20: Weight <br> - 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. <br> - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 19 and 20 <br> Summative <br> - Module Tests 19 and 20 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 5 Performance Task after Module 20 <br> - See also integrated and modifications appendix |

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K.CC.A. }3\mathrm{ Count and write
numbers 0-15
K.CC.B.4a Count objects one by
one and say the number names
in order
K.CC.B.4b Understand the last
number they say is how many
objects they counted
K.CC.B.4c Understand as they
count, the next number is one
more
K.CC.B. }5\mathrm{ Count up to }15\mathrm{ objects
K.CC.C. }6\mathrm{ Tell if a group is greater
than, less than or equal to
another group
K.CC.C. }7\mathrm{ Compare two numbers
between }1\mathrm{ and }1
K.OA.A. }3\mathrm{ Show different ways to
make a number that is less than
or equal to }1
K.OA.A.4 Add numbers to make
10
K.OA.A. }5\mathrm{ Add and subtract with
numbers 0-5
K.G.A. }2\mathrm{ Name shapes
(2-Dimensional) *if needed
K.G.A.3 Describe shapes as flat
or solid
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## Appendix A

## Core Instructional \& Supplemental Materials

Grade Kindergarten
Core Instructional Materials: IntoMath Grade 1 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Appendix B | Technology Integration Grade \# 1 |
| :---: | :---: |
| Standards |  |
| 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (6.SP.B.4) <br> 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations. 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data <br> 9.4.8.TL.3: Select appropriate tools to organize and present information digitally. | - National Library of Virtual Manipulatives <br> - Math Resources for Technology https://drive.google.com/file/d/0B4Zh BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing <br> - Smart Board Applications <br> - Into Math applications and online resources <br> - Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated. Some digital tools are appropriate for gathering, organizing, analyzing, and presenting information, while other types of digital tools are appropriate for creating text, visualizations, models, and communicating with others. |

- Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy
- Creativity \& Innovation
- Critical Thinking \& Problem Solving
- Communication \& Collaboration
- Media Literacy
- Information Literacy
- Information, Communication \& Technology
- Life \& Career Skills

STEM

- Social-Emotional Learning - Learning Mindset
- Perseverance: Checks for Understanding
- Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills.
- Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations

Treps

- TREP\$ is a 6 week educational program which empowers children by providing an engaging project-based learning experience which creatively integrates entrepreneurship education with the authentic opportunity to apply business, academic, and life skills. The benefits of teaching entrepreneurship using TREP\$ are far-reaching. Children who participate in TREP\$ provides a feeling of empowerment and confidence that comes with starting a business. During the workshops, the classroom takes on a professional environment as students are encouraged to develop leadership skills, practice critical thinking, solve problems creatively, demonstrate economic concepts, become risk takers, learn from the business community, and begin planning their own businesses. TREP $\$$ is a situation where it is possible for all students to succeed. TREP\$ rewards those students with passion, determination, and a strong work ethic to become entrepreneurs.

| Appendix D | Career Education Integration Grade Kindergarten |
| :---: | :---: |
| Standards |  |
| 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them. 9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time. <br> 9.1.2.PB.2: Explain why an individual would choose to save money. <br> 9.1.2.FP.2: Differentiate between financial wants and needs. - <br> 9.1.2.FP.3: Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society). <br> 9.1.2.FP.1: Explain how emotions | Core ideas: <br> - You can give back in areas that matter to you. <br> - There are benefits to having a positive credit history. <br> - Taxes are collected on a variety of goods and services at the local, state, and federal levels. <br> - There is a broader economic system that influences your financial goals. <br> - There are agencies, laws, and resources to protect individuals as consumers. <br> - People can choose to save money in many places such as home in a piggy bank, bank, or credit union. <br> - An individual's financial traits and habits affect his/her finances. <br> - Spending choices and their intended and unintended consequences impact financial outcomes and personal wellbeing. <br> - Not all financial information is accurate or truthful. <br> - Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk. <br> Planning and Budgeting: |

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influence whether a person
spends or saves.
9.1.2. FI.1: Differentiate the
various forms of money and how
they are used (e.g., coins, bills,
checks, debit and credit cards).
9.1.2.CR.1: Recognize ways to
volunteer in the classroom,
school and community.
9.1.2.CR.2: List ways to give
back, including making donations,
volunteering, and starting a
business.
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- There are specific steps associated with creating a budget.
- Saving money can impact an individual's ability to address emergencies and accomplish their short-and long-term goals.

| Grade 1- Mathematics Pacing Guide |  |  |
| :---: | :---: | :---: |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| - Represent and solve problems involving addition and subtraction within 12 , including missing addends (addition only). <br> - Demonstrate fluency for addition within 12. <br> - Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 12 . <br> - Extend the counting sequence to 120 . | - Represent and solve problems involving addition and subtraction within 20 , including missing addends (addition and subtraction within 10). <br> - Demonstrate fluency for addition (within 20) and subtraction (within 10). Use a variety of strategies to add and subtract within 20. <br> - Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. <br> - Understand place value. Use place value understanding and properties of operations to add and subtract. <br> - Work with addition and subtraction equations to determine if equations are true or false. | - Represent and solve problems involving addition and subtraction within 20 , including missing addends in all positions (addition and subtraction within 20). <br> - Demonstrate fluency for addition and subtraction within 20. <br> - Measure lengths indirectly and by iterating length units. <br> - Tell and write time in hours and half hours using analog and digital clocks. <br> - Represent and interpret data. <br> - Reason with shapes and their attributes. |


| Mathematics |  | Grade \# 1 |
| :---: | :---: | :---: |
| Unit 1 | Ways to Add and Subtract | 32-34 days |
| Essential Question | What does it mean to add? What does it mean to subtract? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 1.OA.B. 3 I can use strategies to make it easier to add and subtract. <br> 1.OA.B. 4 I can use addition facts to solve subtraction problems. <br> 1.OA.D. 8 I can figure out a | - Module 1: Addition Strategies <br> - Represent addition <br> - Count on <br> - Add 10 and more <br> - Make a 10 to add <br> - Add doubles | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1, 2, 3, 4 |

missing number in an addition equation.
1.OA.A. 1 I can solve addition and subtraction word problems within 12.
1.OA.C. 6 I can use mental strategies to add and subtract within 12
1.OA.C. 6 I can fluently add within 12.
1.OA.C. 5 I can count on to add. I can count back to subtract
1.NBT.A. 1 I can read and write numbers up to 120.
1.NBT.A. 1 I can count from any number to 120

- Use known sums to add


## - Choose a strategy to add

- Module 2: Subtraction Strategies
- Represent subtraction
- Count back
- Cont on to subtract
- Add to subtract
- Use 10 to subtract
- Module 3: Properties of Operations
- Addition in any order
- Add in any order
- Represent addition of 3 numbers
- Add 3 numbers
- Add 3 numbers to solve problems
- Determine equal and not equal
- Develop fluency in addition
- Module 4: Apply the Addition and Subtraction Relationship
- Think addition to subtract
- Represent related facts
- Identify related facts
- Use addition to check subtraction
- Use subtraction to find an unknown addend
- Solve for the unknown addend
- Develop fluency in subtraction


## Summative

- Module Tests 1, 2, 3, 4 (Forms A and B) Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark


## Alternative

- Unit 1 Performance Task after Module 4
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 1 |
| :---: | :---: | :---: |
| Unit 2 | Addition and Subtraction Situations and Data | 26-28 days |
| Essential Question | How can you add or subtract to solve word problems when the result is unknown and represent the problem with objects, drawings, and equations? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 1.OA.B. 3 I can use strategies to make it easier to add and subtract. | - Module 5: Understand And to And Take from Problems - Represent result unknown problems with objects and drawings | Formative <br> - Check for Understanding (each lesson/module) |

1.OA.B. 4 I can use addition facts to solve subtraction problems.
1.OA.D. 8 I can figure out a missing number in an addition equation.
1.OA.A. 1 I can solve addition and subtraction word problems within 12.
1.OA.C. 6 I can use mental strategies to add and subtract within 12.
1.OA.C. 6 I can fluently add within 12.
1.OA.C. 5 I can count on to add. I can count back to subtract
1.NBT.A. 1 I can read and write numbers up to 120 .
1.NBT.A. 1 I can count from any number to 120 .

- Represent change unknown problems with objects and drawings
- Represent start unknown problems with objects and drawings
- Solve to and take from problems
- Module 6: Understand Put Together and Take Apart Problems
- Represent total unknown problems with objects and drawings
- Represent both addends unknown problems with objects and drawings
- Represent addend unknown problems with objects and drawings
- Represent total unknown problems with a visual model
- Represent addend unknown and both addends unknown problems with a visual model
- Solve put together and take apart problems
- Solve addition and subtraction problems
- Module 7: Understand Compare Problems
- Represent difference unknown problems with objects and drawings
- Represent bigger unknown problems with objects and drawings
- Represent smaller unknown problems with objects and drawings
- Represent difference unknown problems with a visual model
- Represent bigger unknown problems and smaller unknown problems with a visual model
- Use strategies to solve compare problems
- Solve addition and subtraction situations
- Module 8: Data
- Interpret picture graphs
- Represent data with picture graphs
- Interpret tally charts
- Represent data with tally charts
- Interpret bar graphs
- Represent data with bar graphs
- Use data to solve problems
- Homework/Extra Practice (each lesson/module)
- Module Reviews 5, 6, 7, 8

Summative

- Module Tests 5, 6, 7, 8 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark

Alternative

- Unit 2 Performance Task after Module 8
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 1 |
| :---: | :---: | :---: |
| Unit 3 | Numbers to 120 | 22-24 days |
| Essential Question | How can you represent a number from 11 to 19 as a ten and ones with objects and drawings? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 1.OA.B. 3 I can use strategies to make it easier to add and subtract. <br> 1.OA.B. 4 I can use addition facts to solve subtraction problems. <br> 1.OA.D. 8 I can figure out a missing number in an addition equation. <br> 1.OA.A. 1 I can solve addition and subtraction word problems within 12. <br> 1.OA.C. 6 I can use mental strategies to add and subtract within 12. <br> 1.OA.C. 6 I can fluently add within 12. <br> 1.OA.C. 5 I can count on to add. I can count back to subtract 1.NBT.A. 1 I can read and write numbers up to 120 . <br> 1.NBT.A. 1 I can count from any number to 120 . | - Module 9: Understand Place Value <br> - Make tens and ones <br> - Understand tens and ones <br> - Make tens <br> - Module 10: Count and Represent Numbers <br> - Count to 120 <br> - Represent numbers as tens and ones with objects <br> - Represent numbers as tens and ones with drawings <br> - Decompose numbers in different ways <br> - Represent, read, and write numbers from 100 to 110 <br> - Represent, read, and write numbers from 110 to 120 <br> - Module 11: Compare Numbers <br> - Understand greater than <br> - Understand less than <br> - Use symbols to compare <br> - Compare numbers | Include formative, summative, benchmark and alternative Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 9, 10, 11 <br> Summative <br> - Module Tests 9, 10, 11 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 3 Performance Task after Module 11 <br> See also integrated and modifications appendixas appropriate. |


| Mathematics |  | Grade \# 1 |
| :---: | :---: | :---: |
| Unit 4 | Addition and Subtraction in Base 10 | 18-20 days |
| Essential Question | How can you add and subtract multiples of ten with other multiples of ten? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 1.OA.B. 3 I can use strategies to make it easier to add and subtract. <br> 1.OA.B. 4 I can use addition facts to solve subtraction problems. <br> 1.OA.D. 8 I can figure out a missing number in an addition equation. <br> 1.OA.A. 1 I can solve addition and subtraction word problems within 12. <br> 1.OA.C. 6 I can use mental strategies to add and subtract within 12. <br> 1.OA.C. 6 I can fluently add within 12. <br> 1.OA.C. 5 I can count on to add. I can count back to subtract 1.NBT.A. 1 I can read and write numbers up to 120 . <br> 1.NBT.A. 1 I can count from any number to 120 . | - Module 12: Understand Addition and Subtraction with Tens and Ones <br> - Represent adding tens <br> - Represent subtracting tens <br> - Add or subtract tens <br> - Use a hundred chart to add <br> - Represent addition with tens and ones <br> - Make ten to add <br> - Make ten to add with a visual model <br> - Use mental math to find 10 less and 10 more <br> - Module 13: Two-Digit Addition and Subtraction <br> - Use a hundred chart to show two-digit addition and subtraction <br> - Understand and explain place value subtraction <br> - Solve two-digit addition and subtraction problems <br> - Practice facts to 20 <br> - Practice two-digit addition and subtraction | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 12, 13 <br> Summative <br> - Module Tests 12, 13 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 4 Performance Task after Module 13 <br> - See also integrated and modifications appendix |

## Mathematics

## Grade \# 1

Unit 5

## Geometry

| Essential Question | How can you describe, build, and draw three-dimensional shapes? |  |
| :---: | :---: | :---: |
| Standards | Knowledge/Skills | Evidence of Learning |
| 1.OA.B. 3 I can use strategies to make it easier to add and subtract. <br> 1.OA.B. 4 I can use addition facts to solve subtraction problems. <br> 1.OA.D. 8 I can figure out a missing number in an addition equation. <br> 1.OA.A. 1 I can solve addition and subtraction word problems within 12. <br> 1.OA.C. 6 I can use mental strategies to add and subtract within 12. <br> 1.OA.C. 6 I can fluently add within 12. <br> 1.OA.C. 5 I can count on to add. I can count back to subtract <br> 1.NBT.A. 1 I can read and write numbers up to 120 . <br> 1.NBT.A. 1 I can count from any number to 120 . | - Module 14: Three Dimensional Shapes <br> - Describe and draw three-dimensional shapes <br> - Compose three-dimensional shapes <br> - Make three-dimensional shapes <br> - Module 15: Two-Dimensional Shapes <br> - Sort two-dimensional shapes by attribute <br> - Describe and draw two-dimensional shapes <br> - Identify composed shapes <br> - Make new two-dimensional shapes <br> - Module 16: Fraction Foundations <br> - Take apart two-dimensional shapes <br> - Identify equal or unequal shares <br> - Partition shapes into halves <br> - Partition shapes into fourths | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 14, 15, 16 <br> Summative <br> - Module Tests 14, 15, 16 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 5 Performance Task after Module 16 <br> - See also integrated and modifications appendix |


| Mathematics |  | Grade \# 1 |
| :---: | :--- | :--- |
| Unit 6 | Measurement | 10-12 days |
| Essential Question | How can you order objects by length? |  |
| Standards | Knowledge/Skills | Evidence of Learning |

1.OA.B. 3 I can use strategies to make it easier to add and subtract.
1.OA.B. 4 I can use addition facts to solve subtraction problems.
1.OA.D. 8 I can figure out a missing number in an addition equation.
1.OA.A. 1 I can solve addition and subtraction word problems within 12.
1.OA.C. 6 I can use mental strategies to add and subtract within 12.
1.OA.C. 6 I can fluently add within 12.
1.OA.C. 5 I can count on to add. I can count back to subtract 1.NBT.A. 1 I can read and write numbers up to 120.
1.NBT.A. 1 I can count from any number to 120.
1.G.A. 3 I can name the smaller parts.
1.G.A. 1 I can build and draw shapes with certain attributes. 1.G.A. 1 I know the difference between attributes that define a shape and attributes that describe a shape.
1.MD.A. 2 I can measure objects with nonstandard units.

- Module 17: Measure Length
- Order length
- Use indirect measurement to compare length
- Use nonstandard units to measure length
- Make a nonstandard measuring tool
- Module 18: Measure Time
- Understand time to the hour
- Understand time to the half hour
- Tell time to the hour and half hour

Formative

- Check for Understanding (each lesson/module)
- Homework/Extra Practice (each lesson/module)
- Module Reviews 17, 18

Summative

- Module Tests 17, 18 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark


## Alternative

- Unit 6 Performance Task after Module 18
- See also integrated and modifications appendix

Core Instructional Materials: IntoMath Grade 1 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Grade 2- Mathematics Pacing Guide |  |  |
| :---: | :---: | :---: |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| - Understanding addition and subtraction <br> - Mental addition and subtraction to 100 <br> - Place value to 100 <br> - Introduction of time | - Addition and subtraction within 1,000 <br> - Place value within 1,000 <br> - Identifying coins <br> - Counting money | - Money word problems <br> - Measurement <br> - Geometry <br> - Time and data graphs |


|  | Mathematics | Grade \# 2 |
| :---: | :---: | :---: |
| Unit 1 | Numbers to 20 and Data | 32-34 days |
| Essential Question | What are some ways to think about addition and subtraction? How can numbers to 100 be shown and compared? How can numbers within 100 be added and subtracted? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 2. OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones <br> 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are 1-9 hundreds in the numbers 100-900 <br> 2.NBT. 2 I can count by 5 s , 10s, and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 2.NBT. 4 I can compare | - Module 1: Fluency for Addition and Subtraction Within 20 <br> - Fluently add and subtract within 20 using mental strategies. By the end of Grade 2, know from memory all sums of two one-digit numbers. <br> - Module 2: Equal Groups <br> - Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2 s ; write an equation to express an even number as a sum of two equal addends. <br> - Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. <br> - Module 3: Data <br> - Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1, 2, and 3 <br> Summative <br> - Module Tests 1, 2, and 3 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |


| two-three-digit numbers <br> 2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes | problems using information presented in a bar graph. | Alternative <br> - Unit 1 Performance Task after Module 3 <br> - See also integrated and modifications appendix |
| :---: | :---: | :---: |


| Mathematics |  | Grade \# 2 |
| :---: | :---: | :---: |
| Unit 2 | Place Value | 26-28 days |
| Essential Question | What number patterns are helpful in reading and writing numbers to 1,000 ? What are the standard procedures for adding and subtracting two-digit numbers? What are the ways to add and subtract three-digit numbers? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 2. OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones <br> 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are 1-9 hundreds in the numbers 100-900 <br> 2.NBT. 2 I can count by 5 s , 10 s , and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 <br> 2.NBT. 4 I can compare | - Module 4: Understand Place Value <br> - 100 can be thought of as a bundle of ten tens-called a "hundred." <br> - The numbers $100,200,300,400,500,600,700,800,900$ refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). <br> - Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. <br> - Module 5: Read, Write, and Show Numbers to 1,000 <br> - Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. <br> - Module 6: Use Place Value <br> - Count within 1000 ; skip-count by 5 s, 10 s, and 100 s. <br> - Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. <br> - Compare two three-digit numbers based on meanings of | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 4, 5, and 6 <br> Summative <br> - Module Tests 4, 5, and 6 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |

## two-three-digit numbers

2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping
2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900
2.MD. 7 I can tell and write time to the nearest five minutes
the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.

## Alternative

- Unit 2 Performance Task after Module 6
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 2 |
| :---: | :---: | :---: |
| Unit 3 | Money and Time | 22-24 days |
| Essential Question | What strategies can be used to count money? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 2.OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones 2.NBT.1a l know that 100 is ten tens <br> 2.NBT.1b I know that there are 1-9 hundreds in the numbers 100-900 <br> 2.NBT. 2 I can count by 5 s , 10 s , and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 2.NBT. 4 I can compare two-three-digit numbers | - Module 7: Coins <br> - Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $\$$ and $\phi$ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? <br> - Module 8: Dollar Amounts <br> - Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $\$$ and $\phi$ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? <br> - Module 9: Time <br> - Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. | Include formative, summative, benchmark and alternative Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 7, 8, and 9 <br> Summative <br> - Module Tests 7, 8, and 9 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment |


| 2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes <br> 2.OA. 1 I can solve addition and subtraction word problems within 100 <br> 2.NBT. 3 I can read and write numbers in many ways to 1,000 <br> 2.NBT. 5 I can fluently add and subtract within 100 <br> 2.NBT. 6 I can add up to four two-digit numbers <br> 2.NBT. 7 I can add and subtract within 1,000 using many strategies <br> 2.NBT. 9 I can explain how addition and subtraction work. <br> 2.MD. 6 I can represent whole numbers as lengths on a number line <br> 2.MD. 8 I can identify and count coins |  | - Freckle MOY Benchmark <br> Alternative <br> - Unit 3 Performance Task after Module 9 <br> See also integrated and modifications appendixas appropriate. |
| :---: | :---: | :---: |


| Unit 4 | Two-Digit Addition and Subtraction | 18-20 days |
| :---: | :--- | :--- |
| Essential Question | What number patterns are helpful in reading and writing numbers to 1,000? What are the standard <br> procedures for adding and subtracting two-digit numbers? What are the ways to add and subtract three-digit <br> numbers? |  |


| Standards | Knowledge/Skills | Evidence of Learning |
| :---: | :---: | :---: |
| 2.OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones <br> 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are <br> 1-9 hundreds in the numbers <br> 100-900 <br> 2.NBT. 2 I can count by 5 s , 10s, and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 <br> 2.NBT. 4 I can compare two-three-digit numbers <br> 2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes <br> 2.OA. 1 I can solve addition and subtraction word problems within 100 <br> 2.NBT. 3 I can read and write numbers in many ways to 1,000 <br> 2.NBT. 5 I can fluently add and subtract within 100 <br> 2.NBT. 6 I can add up to four two-digit numbers <br> 2.NBT. 7 I can add and subtract within 1,000 using many | - Module 12: Understand Addition and Subtraction with Tens and Ones <br> - Represent adding tens <br> - Represent subtracting tens <br> - Add or subtract tens <br> - Use a hundred chart to add <br> - Represent addition with tens and ones <br> - Make ten to add <br> - Make ten to add with a visual model <br> - Use mental math to find 10 less and 10 more <br> - Module 13: Two-Digit Addition and Subtraction <br> - Use a hundred chart to show two-digit addition and subtraction <br> - Understand and explain place value subtraction <br> - Solve two-digit addition and subtraction problems <br> - Practice facts to 20 <br> - Practice two-digit addition and subtraction | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 12, 13 <br> Summative <br> - Module Tests 12, 13 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative <br> - Unit 4 Performance Task after Module 13 <br> - See also integrated and modifications appendix |

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strategies
2.NBT.9 I can explain how
addition and subtraction work.
2.MD.6 I can represent whole
numbers as lengths on a number
line
2.MD.8 I can identify and count
coins
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| Mathematics |  | Grade \# 2 |
| :---: | :---: | :---: |
| Unit 5 | Three Digit Addition and Subtraction | 16-18 days |
| Essential Question | What number patterns are helpful in reading and writing numbers to 1,000 ? What are the standard procedures for adding and subtracting two-digit numbers? What are the ways to add and subtract three-digit numbers? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 2.OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones <br> 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are 1-9 hundreds in the numbers 100-900 <br> 2.NBT. 2 I can count by 5 s , 10 s , and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 <br> 2.NBT. 4 I can compare two-three-digit numbers <br> 2.NBT. 7 I can add and subtract | - Module 14: Three Dimensional Shapes <br> - Describe and draw three-dimensional shapes <br> - Compose three-dimensional shapes <br> - Make three-dimensional shapes <br> - Module 15: Two-Dimensional Shapes <br> - Sort two-dimensional shapes by attribute <br> - Describe and draw two-dimensional shapes <br> - Identify composed shapes <br> - Make new two-dimensional shapes <br> - Module 16: Fraction Foundations <br> - Take apart two-dimensional shapes <br> - Identify equal or unequal shares <br> - Partition shapes into halves <br> - Partition shapes into fourths | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 14, 15, 16 <br> Summative <br> - Module Tests 14, 15, 16 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative |


| within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes <br> 2.OA. 1 I can solve addition and subtraction word problems within 100 <br> 2.NBT. 3 I can read and write numbers in many ways to 1,000 <br> 2.NBT. 5 I can fluently add and subtract within 100 <br> 2.NBT. 6 I can add up to four two-digit numbers <br> 2.NBT. 7 I can add and subtract within 1,000 using many strategies <br> 2.NBT. 9 I can explain how addition and subtraction work. 2.MD. 6 I can represent whole numbers as lengths on a number line <br> 2.MD. 8 I can identify and count coins |  | - Unit 5 Performance Task after Module 16 <br> - See also integrated and modifications appendix |
| :---: | :---: | :---: |


| Mathematics |  | Grade \# 2 |
| :---: | :--- | :--- |
| Unit 6 | Measurement and Length | 10-12 days |
| Essential Question | What is the process for measuring length? How can shapes be described and compared? How can clocks, <br> bar graphs, and pictographs be used to show data and answer questions? What is the relationship between <br> arrays and repeated addition? |  |


| Standards | Knowledge/Skills | Evidence of Learning |
| :---: | :---: | :---: |
| 2.OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones <br> 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are <br> 1-9 hundreds in the numbers <br> 100-900 <br> 2.NBT. 2 I can count by 5 s , 10s, and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 <br> 2.NBT. 4 I can compare two-three-digit numbers <br> 2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes <br> 2.OA. 1 I can solve addition and subtraction word problems within 100 <br> 2.NBT. 3 I can read and write numbers in many ways to 1,000 <br> 2.NBT. 5 I can fluently add and subtract within 100 <br> 2.NBT. 6 I can add up to four two-digit numbers <br> 2.NBT. 7 I can add and subtract within 1,000 using many | - Module 17: Measure Length <br> - Order length <br> - Use indirect measurement to compare length <br> - Use nonstandard units to measure length <br> - Make a nonstandard measuring tool <br> - Module 18: Measure Time <br> - Understand time to the hour <br> - Understand time to the half hour <br> - Tell time to the hour and half hour <br> - Module 19: Length in Centimeters and Meters <br> - Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes <br> - Estimate lengths using units of inches, feet, centimeters, and meters. <br> - Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. <br> - Module 20: Relate Addition and Subtraction to Length <br> - Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers $0,1,2, \ldots$, and represent whole-number sums and differences within 100 on a number line diagram. <br> - Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. <br> - Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 17, 18, 19 , and 20 <br> Summative <br> - Module Tests 17, 18, 19, and 20 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath EOY Assessment <br> - Freckle EOY Benchmark <br> Alternative <br> - Unit 6 Performance Task after Module 20 <br> - See also integrated and modifications appendix |

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strategies
2.NBT.9 I can explain how
addition and subtraction work.
2.MD.6 I can represent whole
numbers as lengths on a number
line
2.MD.8 I can identify and count
coins
2.OA.4 I can use repeated
addition to figure out how many
objects are in rows and columns.
2.MD.1 I can use tools to
measure length
2.MD. I I can measure the length
of an object using two different
units
2.MD. }3\mathrm{ I can estimate lengths
2.MD.4 I can measure to figure
out how much longer one object
is than another
2.MD. }5\mathrm{ I can use addition and
subtraction within100 to solve
measurement word problems
2.MD.7 I can tell time to the
nearest five minutes.
2.MD.8 I can solve money word
problems.
2.MD.9 I can display and analyze
measurement data
2.MD.10 I can show data on a
picture graph and a bar graph.I
can analyze data in a bar graph.
2.G.1 I can recognize and draw shapes based on attributes.
2.G.2 I can divide rectangles into
rows and columns of same-size
squares. 2.G. }3\mathrm{ I can divide circles
and rectangles into two, three,
and four equal parts and name
```

|  | Mathematics | Grade \# 2 |
| :---: | :---: | :---: |
| Unit 7 | Geometry and Fractions | 10-12 days |
| Essential Question | What are ways to recognize and draw shapes? How can students partition shapes into equal parts? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 2.OA. 2 I can fluently add and subtract within 20. <br> 2.OA. 3 I can tell if a number is odd or even <br> 2.NBT. 1 I know that three-digit numbers are made up of hundreds, tens, and ones 2.NBT.1a I know that 100 is ten tens <br> 2.NBT.1b I know that there are 1-9 hundreds in the numbers 100-900 <br> 2.NBT. 2 I can count by 5 s , 10 s , and 100 s within 1,000 . <br> 2.NBT. 3 I can read and write numbers in many ways to 100 <br> 2.NBT. 4 I can compare two-three-digit numbers <br> 2.NBT. 7 I can add and subtract within 100 using many strategies without regrouping <br> 2.NBT. 8 I can mentally add or subtract 10 or 100 to or from a number 100-900 <br> 2.MD. 7 I can tell and write time to the nearest five minutes <br> 2.OA. 1 I can solve addition and | - Module 21: Two and Three-Dimensional Shapes <br> - Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes <br> - Module 22: Understand Fractions <br> - Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. <br> - Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. <br> - Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 21 and 22 <br> Summative <br> - Module Tests 21 and 22 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath EOY Assessment <br> - Freckle EOY Benchmark <br> Alternative <br> - Unit 6 Performance Task after Module 22 <br> - See also integrated and modifications appendix |

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subtraction word problems within
100
2.NBT.3 I can read and write
numbers in many ways to 1,000
2.NBT.5 I can fluently add and
subtract within }10
2.NBT.6 I can add up to four
two-digit numbers
2.NBT.7 I can add and subtract
within 1,000 using many
strategies
2.NBT.9 I can explain how
addition and subtraction work.
2.MD.6 I can represent whole
numbers as lengths on a number
line
2.MD.8 I can identify and count
coins
2.OA.4 I can use repeated
addition to figure out how many
objects are in rows and columns.
2.MD.1 I can use tools to
measure length
2.MD. }2\mathrm{ I can measure the length
of an object using two different
units
2.MD. }3\mathrm{ I can estimate lengths
2.MD.4 I can measure to figure
out how much longer one object
is than another
2.MD.5 I can use addition and
subtraction within100 to solve
measurement word problems
2.MD.7 I can tell time to the
nearest five minutes.
2.MD.8 I can solve money word
problems.
2.MD.9 I can display and analyze
measurement data
```

2.MD. 10 I can show data on a picture graph and a bar graph. I can analyze data in a bar graph. 2.G. 1 I can recognize and draw shapes based on attributes. 2.G. 2 I can divide rectangles into rows and columns of same-size squares. 2.G. 3 I can divide circles and rectangles into two, three, and four equal parts and name those parts.

## Appendix A

Core Instructional Materials: IntoMath Grade 1 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Appendix B |  | Technology Integration |
| :--- | :--- | :--- |
| Standards |  | Grade \# 2 |

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to organize and present information
digitally.
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## Appendix C

## Interdisciplinary Connections

- Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy
- Creativity \& Innovation
- Critical Thinking \& Problem Solving
- Communication \& Collaboration
- Media Literacy
- Information Literacy
- Information, Communication \& Technology
- Life \& Career Skills

STEM

- Social-Emotional Learning - Learning Mindset
- Perseverance: Checks for Understanding
- Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills.
- Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations

Treps

- TREP\$ is a 6 week educational program which empowers children by providing an engaging project-based learning experience which creatively integrates entrepreneurship education with the authentic opportunity to apply business, academic, and life skills. The benefits of teaching entrepreneurship using TREP\$ are far-reaching. Children who participate in TREP\$ provides a feeling of empowerment and confidence that comes with starting a business. During the workshops, the classroom takes on a professional environment as students are encouraged to develop leadership skills, practice critical thinking, solve problems creatively, demonstrate economic concepts, become risk takers, learn from the business community, and begin planning their own businesses. TREP\$ is a situation where it is possible for all students to succeed. TREP\$ rewards those students with passion, determination, and a strong work ethic to become entrepreneurs.

Appendix D

| Standards |  |
| :---: | :---: |
| 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them. 9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time. <br> 9.1.2.PB.2: Explain why an individual would choose to save money. <br> 9.1.2.FP.2: Differentiate between financial wants and needs. $\cdot$ <br> 9.1.2.FP.3: Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society). <br> 9.1.2.FP.1: Explain how emotions influence whether a person spends or saves. <br> 9.1.2. FI.1: Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards). 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. • <br> 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business. | Core ideas: <br> - You can give back in areas that matter to you. <br> - There are benefits to having a positive credit history. <br> - Taxes are collected on a variety of goods and services at the local, state, and federal levels. <br> - There is a broader economic system that influences your financial goals. <br> - There are agencies, laws, and resources to protect individuals as consumers. <br> - People can choose to save money in many places such as home in a piggy bank, bank, or credit union. <br> - An individual's financial traits and habits affect his/her finances. <br> - Spending choices and their intended and unintended consequences impact financial outcomes and personal wellbeing. <br> - Not all financial information is accurate or truthful. <br> - Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk. <br> Planning and Budgeting: <br> - There are specific steps associated with creating a budget. <br> - Saving money can impact an individual's ability to address emergencies and accomplish their short-and long-term goals. |


| Grade 3- Mathematics Pacing Guide |  |  |
| :---: | :---: | :---: |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| - Numeration <br> - Number sense <br> - Place value <br> - Multiplication <br> - Area | - Division <br> - Fractions <br> - Time | - Liquid volume and mass <br> - Two dimensional shapes and their attributes <br> - Perimeter <br> - Data |


| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 1 | Understand Multiplication and Area | 32-34 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my | - Module 1: Understand Multiplication <br> - Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. <br> - Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1 and 2 |


| answer is reasonable <br> 3.OA. 9 identifies and explains patterns. <br> 3.NBT. 1 rounds a whole number to the nearest ten and nearest hundred. <br> 3.NBT. 2 use strategies for adding and subtracting within 1000 <br> 3.NBT. 3 use strategies to multiple one <br> 3.OA. 5 uses the properties of multiplication and division to solve problems. <br> 3.OA. 1 uses multiplication to figure out the total number of objects in an array or equal groups. <br> 3.OA. 3 multiply to solve word problems. <br> 3.OA. 5 uses the properties of multiplication to solve problems. | - Modu <br> ○ <br> $\circ$ <br> $\circ$ <br> $\circ$ <br> $\circ$ <br> $\circ$ <br> $\circ$ <br> ○ | measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. <br> Apply properties of operations as strategies to multiply and divide. <br> e 2: Relate Multiplication and Area <br> Recognize area as an attribute of plane figures and understand concepts of area measurement. <br> A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. <br> A plane figure which can be covered without gaps or overlaps by $n$ unit squares is said to have an area of $n$ square units. <br> Measure areas by counting unit squares (square cm, square $m$, square in, square ft , and improvised units). Relate area to the operations of multiplication and addition. <br> Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. <br> Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. <br> Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths $a$ and $b+c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. Recognize the area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. |
| :---: | :---: | :---: |

## Summative

- Module Tests 1 and 2 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath BOY Assessment
- Freckle BOY Benchmark


## Alternative

- Unit 1 Performance Task after Module 2
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 2 | Multiplication and Division | 26-28 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable <br> 3.OA. 9 identifies and explains patterns. <br> 3.NBT. 1 rounds a whole number to the nearest ten and nearest hundred. <br> 3.NBT. 2 use strategies for adding and subtracting within 1000 <br> 3.NBT. 3 use strategies to multiple one <br> 3.OA. 5 uses the properties of multiplication and division to solve problems. <br> 3.OA. 6 use my understanding of multiplication to solve division problems. <br> 3.OA. 7 multiply and divide within 100 <br> 3.OA. 8 uses the four operations to solve two step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable. <br> 3.OA. 9 identifies and explains | - Module 3: Understand Multiplication Strategies <br> Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. <br> - Module 4: Apply Multiplication Properties as Strategies Apply properties of operations as strategies to multiply and divide. <br> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5=40$, one knows $40 \div 5$ $=8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <br> - Module 5: Multiplication with Multiples of 10 <br> Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., $9 \times 80,5 \times 60$ ) using strategies based on place value and properties of operations. <br> Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths $a$ and $b+c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. <br> - Apply properties of operations as strategies to multiply and divide. <br> - Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. <br> - Use multiplication and division within 100 to solve word | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 3, 4, 5, 6, 7, and 8 <br> Summative <br> - Module Tests 3, 4, 5, 6, 7, and 8 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative <br> - Unit 2 Performance Task after Module 8 <br> - See also integrated and modifications appendix |

## patterns.

3.NF. 1 recognize fractions
3.OA. 1 uses multiplication to figure out the total number of objects in an array or equal groups.
3.OA. 3 multiply to solve word problems.
3.OA. 5 uses the properties of multiplication to solve problems.
3.OA. 2 divide to show how to share a set of objects equally. I can use division to divide a set of objects into equal groups.
3.OA. 3 multiply divide to solve word problems.
3.OA. 4 finds a missing number in a multiplication of division problem.
problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

- Module 6: Understand Division
- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.
- Apply properties of operations as strategies to multiply and divide.
- Module 7: Relate Multiplication and Division
- Understand division as an unknown-factor problem.
- Fluently multiply and divide within 100 , using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5=40$, one knows $40 \div 5$ $=8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- Apply properties of operations as strategies to multiply and divide.
- Module 8: Apply Multiplication and Division
- Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
- Determine the unknown whole number in a multiplication or division equation relating three whole numbers.
- Understand division as an unknown-factor problem.
- Use multiplication and division within 100 to solve word


| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 3 | Addition and Subtraction Strategies and Application | 22-24 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable <br> 3.OA. 9 identifies and explains patterns. <br> 3.NBT. 1 rounds a whole number to the nearest ten and nearest hundred. <br> 3.NBT. 2 use strategies for adding and subtracting within 1000 <br> 3.NBT. 3 use strategies to multiple one <br> 3.OA. 5 uses the properties of | - Module 9: Addition and Subtraction Strategies <br> - Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <br> - Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. <br> - Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. <br> - Use place value understanding to round whole numbers to the nearest 10 or 100. <br> - Module 10: Addition and Subtraction within 1,000 <br> - Fluently add and subtract within 1000 using strategies | Include formative, summative, benchmark and alternative Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 9, 10, 11 <br> Summative <br> - Module Tests 9, 10, 11 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |

multiplication and division to solve problems.
3.OA. 6 use my understanding of multiplication to solve division problems.
3.OA. 7 multiply and divide within 100
3.OA. 8 uses the four operations
to solve two step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable.
3.OA. 9 identifies and explains patterns.
3.NF. 1 recognize fractions
3.OA. 1 uses multiplication to figure out the total number of objects in an array or equal groups.
3.OA. 3 multiply to solve word problems.
3.OA. 5 uses the properties of multiplication to solve problems.
3.OA. 2 divide to show how to share a set of objects equally. I can use division to divide a set of objects into equal groups.
3.OA. 3 multiply divide to solve word problems.
3.OA. 4 finds a missing number in a multiplication of division problem.
and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

- Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Module 11: Understand Perimeter
- Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
- Module 12: Time Measurement and Intervals
- Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.


## Alternative

- Unit 3 Performance Task after Module 11 See also integrated and modifications appendixas appropriate.

| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 4 | Fractions | 18-20 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable <br> 3.OA. 9 identifies and explains patterns. <br> 3.NBT. 1 rounds a whole number to the nearest ten and nearest hundred. <br> 3.NBT. 2 use strategies for adding and subtracting within 1000 <br> 3.NBT. 3 use strategies to multiple one <br> 3.OA. 5 uses the properties of multiplication and division to solve problems. <br> 3.OA. 6 use my understanding of multiplication to solve division problems. <br> 3.OA. 7 multiply and divide within 100 <br> 3.OA. 8 uses the four operations to solve two step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable. <br> 3.OA. 9 identifies and explains | - Module 13: Understand Fractions as Numbers Understand a fraction $1 / \mathrm{b}$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a / b$ as the quantity formed by a part of size $1 / b$. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. Represent a fraction $1 / b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into $b$ equal parts. Recognize that each part has size $1 / b$ and that the endpoint of the part based at 0 locates the number $1 / b$ on the number line. Represent a fraction a/b on a number line diagram by marking off a length $1 / \mathrm{b}$ from 0 . Recognize that the resulting interval has size $a / b$ and that its endpoint locates the number $\mathrm{a} / \mathrm{b}$ on the number line. <br> Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters. <br> - Module 14: Relate Shapes, Fractions, and Area <br> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <br> - Module 15: Compare Fractions <br> Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 13, 14, 15 , and 16 <br> Summative <br> - Module Tests 13, 14, 15, and 16 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative <br> - Unit 4 Performance Task after Module 16 <br> - See also integrated and modifications appendix |

patterns.
3.NF. 1 recognize fractions 3.OA. 1 uses multiplication to figure out the total number of objects in an array or equal groups.
3.OA. 3 multiply to solve word problems.
3.OA. 5 uses the properties of multiplication to solve problems. 3.OA. 2 divide to show how to share a set of objects equally. I can use division to divide a set of objects into equal groups.
3.OA. 3 multiply divide to solve word problems.
3.OA. 4 finds a missing number in a multiplication of division problem.
fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

- Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
- Module 16: Understand Equivalent Fractions
- Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- Recognize and generate simple equivalent fractions, e.g., $1 / 2=2 / 4,4 / 6=2 / 3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 5 | Measurement and Data | 16-18 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my | - Module 17: Liquid Volumes and Mass <br> - Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (I). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 17 and 18 |


| answer is reasonable |
| :--- |
| 3.OA. 9 identifies and explains |
| patterns. |
| 3.NBT. 1 rounds a whole number |
| to the nearest ten and nearest |
| hundred. |
| 3.NBT. use strategies for adding |
| and subtracting within 1000 |
| 3.NBT. 3 use strategies to multiple |
| one |
| 3.OA. 5 uses the properties of |
| multiplication and division to |
| solve problems. |
| 3.OA. 6 use my understanding of |
| multiplication to solve division |
| problems. |
| 3.OA. 7 multiply and divide within |
| 100 |
| 3.OA. 8 uses the four operations |
| to solve two step word problems |
| where a variable is used to |
| represent an unknown quantity. I |
| can use strategies to decide if my |
| answer is reasonable. |
| 3.OA. identifies and explains |
| patterns. |
| 3.NF. 1 recognize fractions |
| 3.OA. uses multiplication to |
| figure out the total number of |
| objects in an array or equal |
| groups. |
| 3.OA. 3 multiply to solve word |
| problems. |
| 3.OA. 5 uses the properties of |
| multiplication to solve problems. |
| 3.OA. divide to show how to |
| share a set of objects equally. I |
| can use division to divide a set of |
| objects into equal groups. |

## (such as a beaker with a measurement scale) to

 represent the problem.- Module 18: Represent and Interpret Data
- Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve oneand two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
- Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters.


## Summative

- Module Tests 17 and 18 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath EOY Assessment
- Freckle EOY Benchmark


## Alternative

- Unit 5 Performance Task after Module 18
- See also integrated and modifications appendix
3.OA. 3 multiply divide to solve word problems.
3.OA. 4 finds a missing number in a multiplication of division problem.

| Mathematics |  | Grade \# 3 |
| :---: | :---: | :---: |
| Unit 6 | Geometry | 10-12 days |
| Essential Question |  |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 3.MD. 2 measure customary volume <br> 3.OA. 7 multiply within 100 <br> 3.OA. 8 uses the four operations to solve two-step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable <br> 3.OA. 9 identifies and explains patterns. <br> 3.NBT. 1 rounds a whole number to the nearest ten and nearest hundred. <br> 3.NBT. 2 use strategies for adding and subtracting within 1000 <br> 3.NBT. 3 use strategies to multiple one <br> 3.OA. 5 uses the properties of multiplication and division to solve problems. | - Module 19: Define Two-Dimensional Shapes Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. <br> - Module 20:Categorize Two-Dimensional Shapes Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 19 and 20 <br> Summative <br> - Module Tests 19 and 20 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath EOY Assessment <br> - Freckle EOY Benchmark <br> Alternative <br> - Unit 6 Performance Task after Module 20 <br> - See also integrated and modifications appendix |

3.OA. 6 use my understanding of multiplication to solve division problems.
3.OA. 7 multiply and divide within 100
3.OA. 8 uses the four operations to solve two step word problems where a variable is used to represent an unknown quantity. I can use strategies to decide if my answer is reasonable.
3.OA. 9 identifies and explains patterns.
3.NF. 1 recognize fractions
3.OA. 1 uses multiplication to
figure out the total number of objects in an array or equal groups.
3.OA. 3 multiply to solve word problems.
3.OA. 5 uses the properties of multiplication to solve problems.
3.OA. 2 divide to show how to share a set of objects equally. I can use division to divide a set of objects into equal groups.
3.OA. 3 multiply divide to solve word problems.
3.OA. 4 finds a missing number in a multiplication of division problem.
3.MD.5a uses square units to measure area.
3.NF.2a represents a fraction on a number line from 0 to 1 .
3.MD.5b find area by using square units laid side by side without gaps or overlaps.
3.NF.2b divides a number line

```
into equal parts in order to
represent a fraction on a number
line. 3.MD. }6\mathrm{ find areas by
counting square units (customary
and metric).
3.NF. }3\mathrm{ compare fractions.
3.MD.7 uses multiplication and
addition to solve for area.
3.NF.3a understands what makes
fractions equivalent.
3. MD.7a finds the area by
multiplying the side lengths.
3.NF.3b recognizes and forms
simple equivalent fractions.
3.MD.7b solves problems
involving areas of rectangles.
3.NF.3c expresses whole
numbers as fractions.
3.MD.7c finds the area of a
rectangle by using the Distributive
Property of Multiplication.
3.NF.3d compares fractions that
have the same numerator or the
same denominator. I can justify
the comparisons.
3.MD.7d finds the area of a
rectangular polygon by
separating it into smaller
rectangles and adding the areas.
3.MD. }1\mathrm{ tell and write time to the
nearest minute. I can solve time
problems.
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Core Instructional Materials: IntoMath Grade 3 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Appendix B | Technology Integration Grade \# 3 |
| :---: | :---: |
| Standards |  |
| 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (6.SP.B.4) <br> 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations. 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data <br> 9.4.8.TL.3: Select appropriate tools to organize and present information digitally. | - National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html <br> - Math Resources for Technology <br> https://drive.google.com/file/d/0B4Zh_BcwMUEMOFRfSXZpdW9Yams/view?usp=sharing <br> - Smart Board Applications <br> - Into Math applications and online resources <br> - Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated. Some digital tools are appropriate for gathering, organizing, analyzing, and presenting information, while other types of digital tools are appropriate for creating text, visualizations, models, and communicating with others. |

## Appendix C

- Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy
- Creativity \& Innovation
- Critical Thinking \& Problem Solving
- Communication \& Collaboration
- Media Literacy
- Information Literacy
- Information, Communication \& Technology
- Life \& Career Skills

STEM

- Social-Emotional Learning - Learning Mindset
- Perseverance: Checks for Understanding
- Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills.
- Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations


## Treps

- TREP\$ is a 6 week educational program which empowers children by providing an engaging project-based learning experience which creatively integrates entrepreneurship education with the authentic opportunity to apply business, academic, and life skills. The benefits of teaching entrepreneurship using TREP\$ are far-reaching. Children who participate in TREP\$ provides a feeling of empowerment and confidence that comes with starting a business. During the workshops, the classroom takes on a professional environment as students are encouraged to develop leadership skills, practice critical thinking, solve problems creatively, demonstrate economic concepts, become risk takers, learn from the business community, and begin planning their own businesses. TREP\$ is a situation where it is possible for all students to succeed. TREP\$ rewards those students with passion, determination, and a strong work ethic to become entrepreneurs.

Appendix D
Career Education Integration

## Grade \# 3

| Standards |  |
| :---: | :---: |
| 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them. 9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time. <br> 9.1.2.PB.2: Explain why an | Unit 1 <br> - Will use addition within 100 to solve one- and two-step word problems <br> Unit 2 <br> - Will use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to and taking from |

## individual would choose to save

 money.9.1.2.FP.2: Differentiate between financial wants and needs. 9.1.2.FP.3: Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society).
9.1.2.FP.1: Explain how emotions influence whether a person spends or saves.
9.1.2. FI.1: Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards). 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business.

## Unit 3

- Will understand that the three digits in a three-digit number represent hundreds, tens, and ones.
- Will understand that 100 is 10 tens


## Unit 4

- Will use addition and subtraction within 100 to solve various problem types


## Unit 5

- Will recognize and draw three-dimensional shapes having specified attributes


## Unit 6

- Children demonstrate their understanding of how objects can have the longest or shortest length in a group of objects. This objective focuses on the lengths of three objects. Children can order the three objects longest to shortest or the reverse.


## Core ideas:

- You can give back in areas that matter to you.
- There are benefits to having a positive credit history.
- Taxes are collected on a variety of goods and services at the local, state, and federal levels.
- There is a broader economic system that influences your financial goals.
- There are agencies, laws, and resources to protect individuals as consumers.
- People can choose to save money in many places such as home in a piggy bank, bank, or credit union.
- An individual's financial traits and habits affect his/her finances.
- Spending choices and their intended and unintended consequences impact financial outcomes and personal wellbeing.
- Not all financial information is accurate or truthful.
- Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk.


## Planning and Budgeting:

- There are specific steps associated with creating a budget.
- Saving money can impact an individual's ability to address emergencies and accomplish their short-and long-term goals.

| Pacing Guide |  |  |
| :---: | :---: | :---: |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| - Multiplication \& Division: Meanings and Facts <br> - Place Value <br> - Addition and Subtraction of Whole Numbers <br> - Multiplying by 1-Digit Numbers | - Factors and Multiples <br> - Prime and Composite Numbers <br> - Equivalent Fractions <br> - Comparing and Ordering Fractions and Decimal Numbers <br> - Adding, Subtracting, and Multiplying Fractions | - Measurement and Problem Solving <br> - Geometry: Classifying and Comparing Polygons <br> - Repeating Patterns <br> - Symmetry |


| Mathematics |  | Grade \# 4 |
| :---: | :---: | :---: |
| Unit 1 | Place Value and Whole Number Operations | 32-34 days |
| Essential Question | Can students recognize the relationships of the values of digits in a multi-digit number? Can students explain patterns in the digits of numbers when multiplying and dividing by a power of 10 ? Can students read, write, and compare decimals based on place value? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. <br> 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. <br> 4.NBT. 2 Read, write, and | - Module 1: <br> - Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <br> - Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, $=$, and < symbols to record the results of comparisons. <br> - Use place value understanding to round multi-digit whole numbers to any place. <br> - Module 2: Addition and Subtraction of Whole Numbers <br> - Fluently add and subtract multi-digit whole numbers using the standard algorithm. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1 and 2 <br> Summative <br> - Module Tests 1 and 2 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment |

compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.)। understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$
4.NBT. 3 Round numbers up to one million.
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. 4.0A. 1 Write multiplication equations. 4.0A. 2 Multiply or divide to solve word problems.
4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders. I can use mental math and estimation to decide if my answer makes sense. 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. 4.NBT. 2 Read, write, and compare numbers up to one million.
4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

- Apply the area and perimeter formulas for rectangles in real world and mathematical problems.
- Freckle BOY Benchmark


## Alternative

- Unit 1 Performance Task after Module 2
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 4 |
| :---: | :---: | :---: |
| Unit 2 | Multiplication and Division Problems | 26-28 days |
| Essential Question | Can students use symbols and will evaluate numerical expressions? Can students write simple expressions and will interpret numerical expressions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. <br> 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. <br> 4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$ <br> 4.NBT. 3 Round numbers up to one million. <br> 4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. <br> 4.0A. 1 Write multiplication equations. | - Module 3: Interpret and Solve Problem Situations Interpret a multiplication equation as a comparison, e.g., interpret $35=5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5 . Represent verbal statements of multiplicative comparisons as multiplication equations. <br> - Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. <br> - Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. <br> - Module 4: Mental Math and Estimation Strategies <br> - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 5, 6, 7, 8 <br> Summative <br> - Module Tests 5, 6, 7, 8 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 2 Performance Task after Module 8 <br> - See also integrated and modifications appendix |

4.0A. 2 Multiply or divide to solve word problems.
4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders. I can use mental math and estimation to decide if my answer makes sense.
4.NBT. 1 Understand that each place value is ten times larger than the one to its right. 4.NBT. 2 Read, write, and compare numbers up to one million.
4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

- Use place value understanding to round multi-digit whole numbers to any place.
- Module 5: Multiply by 1-Digit Numbers
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Module 6: Understand Division by 1-Digit Numbers
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
- Module 7: Divide by 1-Digit Numbers
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders

|  | must be interpreted. Represent these problems using <br> equations with a letter standing for the unknown quantity. <br> Assess the reasonableness of answers using mental <br> computation and estimation strategies including rounding. |  |
| :--- | :--- | :--- |


|  | Mathematics | Grade \# 4 |
| :---: | :---: | :---: |
| Unit 3 | Extend and Apply Multiplication | 22-24 days |
| Essential Question | Can students fluently multiply multi-digit whole numbers using the standard algorithm and round decimals to any place? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. <br> 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. <br> 4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$ | - Module 8: Multiply by 2-Digit Numbers <br> - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. Use place value understanding to round multi-digit whole numbers to any place. <br> Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. <br> - Module 9: Apply Multiplication to Area <br> - Apply the area and perimeter formulas for rectangles in real world and mathematical problems. | Include formative, summative, benchmark and alternative Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 8 and 9 <br> Summative <br> - Module Tests 8 and 9 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative <br> - Unit 3 Performance Task after Module 9 <br> See also integrated and |


| 4.NBT.3 Round numbers up to |  | modifications appendixas <br> one million. <br> 4.NBT.5 Multiply large numbers <br> using various strategies and I can <br> illustrate and explain my work. <br> 4.OA.1 Write multiplication <br> equations. <br> 4.0A.2 Multiply or divide to solve <br> word problems. <br> 4.0A.3 Use mathematical <br> operations and variables to solve <br> word problems with and without <br> remainders. I can use mental <br> math and estimation to decide if <br> my answer makes sense. <br> 4.NBT.1 Understand that each <br> place value is ten times larger <br> than the one to its right. <br> 4.NBT.2 Read, write, and <br> compare numbers up to one <br> million. <br> 4.NBT.3 Round numbers up to <br> one million <br> 4.NBT.5 Multiply large numbers <br> using various strategies and I can <br> illustrate and explain my work. |
| :--- | :--- | :--- |
|  |  |  |


| Mathematics |  | Grade \#4 |
| :---: | :--- | :--- |
| Unit 4 | Fractions and Decimals | 18-20 days |
| Essential Question | Can students find quotients of whole numbers with up to 4-digit dividends and 2-digit divisors? Can students <br> find the greatest common factor and the least common multiple of two whole numbers? Can students <br> generate two numerical patterns using two given rules? |  |


| Standards | Knowledge/Skills | Evidence of Learning |
| :---: | :---: | :---: |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. <br> 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. <br> 4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$ <br> 4.NBT. 3 Round numbers up to one million. <br> 4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. <br> 4.0A. 4 Factor numbers from 1 to 100, understand that numbers are multiples of their factors, figure out if a number is a multiple of another number and whether it is prime or composite <br> 4.NF. 1 Recognize and form equivalent fractions. <br> 4.NF. 2 Compare two fractions | - Module 10: Algebraic Thinking and Number Theories Find all factor pairs for a whole number in the range $1-100$. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range $1-100$ is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite. <br> - Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself <br> - Module 11:Fraction Equivalence and Comparison <br> - Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1 / 2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. <br> - Explain why a fraction $a / b$ is equivalent to a fraction ( $n \times$ a) $/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. <br> - Module 12: Relate Fractions and Decimals <br> - Use decimal notation for fractions with denominators 10 or 100. <br> - Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. <br> - Use decimal notation for fractions with denominators 10 or 100. <br> - Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>,=$, or $<$, | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 10, 11, 12, and 13 <br> Summative <br> - Module Tests 10, 11, 12, and 13 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath MOY Assessment <br> - Freckle MOY Benchmark <br> Alternative <br> - Unit 4 Performance Task after Module 13 <br> - See also integrated and modifications appendix |

with different numerators and denominators.
4.NF. 3 . Understand the relationship between numerators and denominators and that a fraction is made up of equal units, understand how to add and subtract fractions that are part of the same whole, break apart a fraction into the sum of smaller fractions with like denominators, write number sentences to show that fractions can be separated in more than one way, use various strategies to add and subtract mixed numbers with like denominators, solve word problems by adding and subtracting fractions with like denominators.
4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to multiply a fraction by a whole number. (c.) I can solve word problems by multiplying a fraction by a whole number.
4.NF. 5 Add fractions with denominators of 10 and 100 by converting them into equivalent fractions
4.NF. 6 Change a fraction with a denominator of 10 or 100 into an equivalent decimal.
and justify the conclusions, e.g., by using a visual model.

- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
- Module 13: Use Fraction to Understand Angles
- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $1 / 360$ of a circle is called a "one degree angle," and can be used to measure angles.
- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: An angle that turns through $n$ one-degree angles is said to have an angle measure of $n$ degrees.
- Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.


## 4.NF. 7 Compare two decimals to

 the hundredths place.4.0A. 1 Write multiplication equations.
4.0A. 2 Multiply or divide to solve word problems.
4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders. I can use mental math and estimation to decide if my answer makes sense. 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. 4.NBT. 2 Read, write, and compare numbers up to one million.
4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

| Mathematics | Grade \#4 |  |
| :---: | :--- | :--- | :--- |
| Unit 5 | Operations with Fractions | 16-18 days |
| Essential Question | Can students add and subtract fractions with unlike denominators? Can students solve word problems with <br> fractions and estimate for reasonableness? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A.1 Write multiplication <br> equations. <br> 4.OA.2 Multiply or divide to solve <br> word problems. | Module 14: Understand Addition and Subtraction of <br> Fractions with Like Denominators <br> 0 Decompose a fraction into a sum of fractions with the <br> same denominator in more than one way, recording each | Formative <br> $\bullet$ <br> Check for Understanding <br> (each lesson/module) <br> Homework/Extra Practice |

4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense.
4.NBT. 1 Understand that each place value is ten times larger than the one to its right. 4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$
4.NBT. 3 Round numbers up to one million.
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. 4.0A. 4 Factor numbers from 1 to 100, understand that numbers are multiples of their factors, figure out if a number is a multiple of another number and whether it is prime or composite
4.NF. 1 Recognize and form equivalent fractions.
4.NF. 2 Compare two fractions with different numerators and denominators.
4.NF. 3 . Understand the relationship between numerators and denominators and that a fraction is made up of equal units,
decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.
- Module 15: Add and Subtract Fractions and Mixed Numbers with Like Denominators
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.
- Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.
- Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Module 16: Multiply Fractions by Whole Numbers
- Understand a fraction $\mathrm{a} / \mathrm{b}$ as a multiple of $1 / \mathrm{b}$.
- Understand a multiple of $a / b$ as a multiple of $1 / b$, and use this understanding to multiply a fraction by a whole number.
- Understand a multiple of $a / b$ as a multiple of $1 / b$, and use this understanding to multiply a fraction by a whole number.
(each lesson/module)
- Module Reviews 14, 15, and 16

Summative

- Module Tests 14, 15, and 16 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath EOY Assessment
- Freckle EOY Benchmark

Alternative

- Unit 5 Performance Task after Module 16
- See also integrated and modifications appendix

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understand how to add and
subtract fractions that are part of
the same whole, break apart a
fraction into the sum of smaller
fractions with like denominators,
write number sentences to show
that fractions can be separated in
more than one way, use various
strategies to add and subtract
mixed numbers with like
denominators, solve word
problems by adding and
subtracting fractions with like
denominators.
4.NF.4 Multiply a fraction by a
whole number. (a.) I understand
that fractions with like
denominators are multiples of the
fraction with the same
denominator and a numerator of
1. (b.) I can use my knowledge of
fraction multiples to multiply a
fraction by a whole number. (c.) I
can solve word problems by
multiplying a fraction by a whole
number.
4.NF.5 Add fractions with
denominators of 10 and 100 by
converting them into equivalent
fractions
4.NF.6 Change a fraction with a
denominator of 10 or 100 into an
equivalent decimal.
4.NF.7 Compare two decimals to
the hundredths place.
4.0A.1 Write multiplication
equations.
4.0A.2 Multiply or divide to solve
word problems.
```


### 4.0A. 3 Use mathematical

 operations and variables to solve word problems with and without remainders. I can use mental math and estimation to decide if my answer makes sense.4.NBT. 1 Understand that each place value is ten times larger than the one to its right. 4.NBT. 2 Read, write, and compare numbers up to one million.
4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

| Mathematics |  | Grade \# 4 |
| :---: | :---: | :---: |
| Unit 6 | Two-Dimensional Figures and Symmetry | 10-12 days |
| Essential Question | Can students understand attributes of and classify two-dimensional figures? Can students measure volumes using cubic units? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. | - Module 17: Two-Dimensional Figures <br> - Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. <br> - Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. <br> - Module 18: Symmetry and Patterns | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 17 and 18 <br> Summative <br> - Module Tests 17 and 18 (Forms A and B) |

4.NBT. 1 Understand that each place value is ten times larger than the one to its right.
4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$ 4.NBT. 3 Round numbers up to one million.
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. 4.0A. 4 Factor numbers from 1 to 100, understand that numbers are multiples of their factors, figure out if a number is a multiple of another number and whether it is prime or composite
4.NF. 1 Recognize and form equivalent fractions.
4.NF. 2 Compare two fractions with different numerators and denominators.
4.NF. 3 . Understand the relationship between numerators and denominators and that a fraction is made up of equal units, understand how to add and subtract fractions that are part of the same whole, break apart a fraction into the sum of smaller fractions with like denominators, write number sentences to show

- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Benchmark

- Into Math Prerequisite Inventory
- IntoMath EOY Assessment
- Freckle EOY Benchmark

Alternative

- Unit 6 Performance Task after Module 18
- See also integrated and modifications appendix
that fractions can be separated in more than one way, use various strategies to add and subtract mixed numbers with like denominators, solve word problems by adding and subtracting fractions with like denominators.
4.NF. 4 Multiply a fraction by a whole number. (a.) I understand that fractions with like denominators are multiples of the fraction with the same
denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to multiply a fraction by a whole number. (c.) I can solve word problems by multiplying a fraction by a whole number.
4.NF.5 Add fractions with denominators of 10 and 100 by converting them into equivalent fractions
4.NF. 6 Change a fraction with a denominator of 10 or 100 into an equivalent decimal.
4.NF. 7 Compare two decimals to the hundredths place.
4.0A. 1 Write multiplication equations.
4.0A. 2 Multiply or divide to solve word problems.
4.0A. 3 Use mathematical
operations and variables to solve word problems with and without remainders. I can use mental math and estimation to decide if my answer makes sense.
4.NBT. 1 Understand that each place value is ten times larger than the one to its right.
4.NBT. 2 Read, write, and compare numbers up to one million.
4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

| Mathematics |  | Grade \# 4 |
| :---: | :---: | :---: |
| Unit 7 | Measurement, Data, and Time | 10-12 days |
| Essential Question | Can students convert different-sized measurement units and will solve multistep word problems? Can students display measurements in a line plot and solve problems using operations of fractions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 4.0A. 1 Write multiplication equations. <br> 4.0A. 2 Multiply or divide to solve word problems. <br> 4.0A. 3 Use mathematical operations and variables to solve word problems with and without remainders, use mental math and estimation to decide if my answer makes sense. <br> 4.NBT. 1 Understand that each place value is ten times larger than the one to its right. <br> 4.NBT. 2 Read, write, and compare numbers up to one million. 4.NF. 4 Multiply a fraction | - Module 19: Relative Sizes of Customary Measurement Units <br> - Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; $\mathrm{hr}, \mathrm{min}, \mathrm{sec}$. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <br> - Make a line plot to display a data set of measurements in fractions of a unit ( $1 / 2,1 / 4,1 / 8$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <br> - Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 19, 20, and 21 <br> Summative <br> - Module Tests 19, 20, and 21 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath EOY Assessment <br> - Freckle EOY Benchmark |

by a whole number. (a.) I
understand that fractions with like denominators are multiples of the fraction with the same denominator and a numerator of 1. (b.) I can use my knowledge of fraction multiples to $m$
4.NBT. 3 Round numbers up to one million.
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work. 4.0A. 4 Factor numbers from 1 to 100, understand that numbers are multiples of their factors, figure out if a number is a multiple of another number and whether it is prime or composite 4.NF. 1 Recognize and form equivalent fractions.
4.NF. 2 Compare two fractions with different numerators and denominators.
4.NF. 3 . Understand the relationship between numerators and denominators and that a fraction is made up of equal units, understand how to add and subtract fractions that are part of the same whole, break apart a fraction into the sum of smaller fractions with like denominators, write number sentences to show that fractions can be separated in more than one way, use various strategies to add and subtract mixed numbers with like denominators, solve word problems by adding and
of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

- Module 20: Relative Sizes of Metric Measurement Units
- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr , min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
- Module 21: Solve Problems with Time and Measurement
- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; $\mathrm{hr}, \mathrm{min}, \mathrm{sec}$. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.


## Alternative

- Unit 6 Performance Task after Module 21
- See also integrated and modifications appendix

```
subtracting fractions with like
denominators.
4.NF.4 Multiply a fraction by a
whole number. (a.) I understand
that fractions with like
denominators are multiples of the
fraction with the same
denominator and a numerator of
1. (b.) I can use my knowledge of
fraction multiples to multiply a
fraction by a whole number. (c.) I
can solve word problems by
multiplying a fraction by a whole
number.
4.NF.5 Add fractions with
denominators of }10\mathrm{ and }100\mathrm{ by
converting them into equivalent
fractions
4.NF.6 Change a fraction with a
denominator of 10 or 100 into an
equivalent decimal.
4.NF.7 Compare two decimals to
the hundredths place.
4.0A.1 Write multiplication
equations.
4.0A.2 Multiply or divide to solve
word problems.
4.0A.3 Use mathematical
operations and variables to solve
word problems with and without
remainders. I can use mental
math and estimation to decide if
my answer makes sense.
4.NBT.1 Understand that each
place value is ten times larger
than the one to its right.
4.NBT.2 Read, write, and
compare numbers up to one
million.
```

4.NBT. 3 Round numbers up to one million
4.NBT. 5 Multiply large numbers using various strategies and I can illustrate and explain my work.

## Appendix A

## Core Instructional \& Supplemental Materials

Core Instructional Materials: IntoMath Grade 1 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Appendix B |  | Technology Integration |
| :--- | :--- | :--- |
| Standards |  | Grade \# 4 |

- Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy
- Creativity \& Innovation
- Critical Thinking \& Problem Solving
- Communication \& Collaboration
- Media Literacy
- Information Literacy
- Information, Communication \& Technology
- Life \& Career Skills

STEM

- Social-Emotional Learning - Learning Mindset
- Perseverance: Checks for Understanding
- Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills.
- Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations

Treps

- TREP\$ is a 6 week educational program which empowers children by providing an engaging project-based learning experience which creatively integrates entrepreneurship education with the authentic opportunity to apply business, academic, and life skills. The benefits of teaching entrepreneurship using TREP\$ are far-reaching. Children who participate in TREP\$ provides a feeling of empowerment and confidence that comes with starting a business. During the workshops, the classroom takes on a professional environment as students are encouraged to develop leadership skills, practice critical thinking, solve problems creatively, demonstrate economic concepts, become risk takers, learn from the business community, and begin planning their own businesses. TREP\$ is a situation where it is possible for all students to succeed. TREP\$ rewards those students with passion, determination, and a strong work ethic to become entrepreneurs.

| Standards |  |
| :---: | :---: |
| 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them. 9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time. <br> 9.1.2.PB.2: Explain why an individual would choose to save money. <br> 9.1.2.FP.2: Differentiate between financial wants and needs. - <br> 9.1.2.FP.3: Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society). <br> 9.1.2.FP.1: Explain how emotions influence whether a person spends or saves. <br> 9.1.2. FI.1: Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards). 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. - <br> 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business. | Unit 1 <br> - Will use addition within 100 to solve one- and two-step word problems <br> Unit 2 <br> - Will use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to and taking from <br> Unit 3 <br> - Will understand that the three digits in a three-digit number represent hundreds, tens, and ones. <br> - Will understand that 100 is 10 tens <br> Unit 4 <br> - Will use addition and subtraction within 100 to solve various problem types <br> Unit 5 <br> - Will recognize and draw three-dimensional shapes having specified attributes <br> Unit 6 <br> - Children demonstrate their understanding of how objects can have the longest or shortest length in a group of objects. This objective focuses on the lengths of three objects. Children can order the three objects longest to shortest or the reverse. <br> Core ideas: <br> - You can give back in areas that matter to you. <br> - There are benefits to having a positive credit history. <br> - Taxes are collected on a variety of goods and services at the local, state, and federal levels. <br> - There is a broader economic system that influences your financial goals. <br> - There are agencies, laws, and resources to protect individuals as consumers. <br> - People can choose to save money in many places such as home in a piggy bank, bank, or credit union. <br> - An individual's financial traits and habits affect his/her finances. <br> - Spending choices and their intended and unintended consequences impact financial outcomes and |


|  | personal wellbeing. <br> - <br> - <br> Not all financial information is accurate or truthful. <br> Indiduals can choose to accept inevitable risk or take steps to protect themselves by avoiding or <br> reducing risk. |
| :--- | :--- |
|  | Planning and Budgeting: <br> - There are specific steps associated with creating a budget. <br> - Saving money can impact an individual's ability to address emergencies and accomplish their <br> short-and long-term goals. |
|  |  |


| Grade 5- Mathematics Pacing Guide |  |  |
| :---: | :---: | :---: |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| - Place Value: Number Sense <br> - The Power of Ten <br> - Comparing and Ordering Decimals to Thousandths <br> - Addition, Subtraction, Multiplication and Division with Decimals to Hundredths | - Fractions: Addition and Subtraction <br> - Fractions: Multiplication and Division <br> - Volume <br> - Line Plots | - Measurement <br> - Geometry: Shapes and Attributes and Coordinate Geometry <br> - Data Interpretation <br> - Algebraic Expressions and Order of Operations |


| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 1 | Whole Numbers, Expression, and Volume | 32-34 days |
| Essential Question | Can students apply their knowledge of place value to fluently multiply multi-digit decimals using the standard algorithm? Can students apply the properties of operations to generate equivalent expressions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 <br> 5.NBT. 2 Use exponents to show powers of 10 <br> 5.NBT. 3 Read, write, and compare decimals to the | - Module 1: Whole Number Place Value and Multiplication <br> - Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1 / 10$ of what it represents in the place to its left. <br> - Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. <br> - Fluently multiply multi-digit whole numbers using the standard algorithm. <br> - Module 2: Understand Division of Whole Numbers <br> - Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1, 2, 3, 4, and 5 <br> Summative <br> - Module Tests 1, 2, 3, 4, and 5 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |

## thousandths place

5.NBT.3a Read, write, and compare decimals to the
thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies
5.NBT.7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

## - Module 3: Practice Division of Whole Numbers

- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Interpret a fraction as division of the numerator by the denominator $(a / b=a \div b)$. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Module 4: Expressions
- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.
- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Module 5: Volume
- A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
- A solid figure which can be packed without gaps or overlaps using $n$ unit cubes is said to have a volume of $n$ cubic units.
- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft , and improvised units.
- Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent


## Alternative

- Unit 1 Performance Task after Module 5
- See also integrated and modifications appendix


| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 2 | Add and Subtract Fractions and Mixed Numbers | 26-28 days |
| Essential Question | Can students represent situations using quotients of fractions? Can students calculate quotients of fractions? Can students solve word problems that require the division of fractions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 <br> 5.NBT. 2 Use exponents to show powers of 10 <br> 5.NBT. 3 Read, write, and compare decimals to the | - Module 6: Understand Addition and Subtraction of Fractions with Unlike Denominators <br> Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <br> - Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <br> - Module 7: Add and Subtract Fractions and Mixed Numbers with Unlike Denominators <br> - Solve word problems involving addition and subtraction of | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 6 and 7 <br> Summative <br> - Module Tests 6 and 7 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark |

## thousandths place

5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT.7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.

- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.


## Alternative

- Unit 2 Performance Task after Module 7
- See also integrated and modifications appendix

| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 3 | Multiply Fractions and Mixed Numbers | 22-24 days |
| Essential Question | Can students solve word problems that involve dividing fractions? Can students interpret and compute quotients of fractions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and | - Module 8: Understand Multiplication of Fractions - Interpret the product $(\mathrm{a} / \mathrm{b}) \times \mathrm{q}$ as a part of a partition of q into $b$ equal parts; equivalently, as the result of a | Include formative, summative, benchmark and alternative Formative |

## $1 / 10$ as large as the place to the left

5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10
5.NBT. 2 Use exponents to show powers of 10
5.NBT. 3 Read, write, and compare decimals to the thousandths place 5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT. 7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
5.NF. 1 Use equivalent fractions to add and subtract fractions with like and unlike denominators 5.NF. 2 Use benchmark fraction to estimate fractions. Use my
sequence of operations $a \times q \div b$.

- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- Interpret multiplication as scaling (resizing), by: Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
- Interpret multiplication as scaling (resizing), by: Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a / b=(n \times a) /(n \times b)$ to the effect of multiplying a/b by 1 .
- Interpret the product $(\mathrm{a} / \mathrm{b}) \times \mathrm{q}$ as a part of a partition of q into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$.
- Module 9: Understand and Apply Multiplication of Mixed Numbers
- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Interpret the product $(\mathrm{a} / \mathrm{b}) \times \mathrm{q}$ as a part of a partition of q into $b$ equal parts; equivalently, as the result of a
- Check for Understanding (each lesson/module)
- Homework/Extra Practice (each lesson/module)
- Module Reviews 8 and 9

Summative

- Module Tests 8 and 9 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath MOY Assessment
- Freckle MOY Benchmark


## Alternative

- Unit 3 Performance Task after Module 9
See also integrated and modifications appendixas appropriate.

```
understanding of fractions to
decide if my answer is
reasonable
5.NF.2 Solve word problems by
adding and subtracting fractions
with like and unlike denominators
5.NF.3 Solve division word
problems where the answer will
be a fraction or a mixed number
5.NF.4 Multiply a fraction or a
whole number by a fraction
5.NF.4a Multiply a fraction or a
whole number using various
strategies
5.NF.4b Use various strategies to
find the area of a rectangle with
fraction side lengths and
represent the area with a fraction
5.NF.5a Understand multiplication
by comparing the sizes of the
factors in related multiplication
problems
5.NF.5b Use my understanding of
multiplication as resizing to
explain the results of multiplying
numbers by fractions greater than
and less than 1
5.NF.6 Solve real world problems
by multiplying fractions and mixed
numbers
5.NF.7 Use understanding of
division to divide fractions
5.NF.7a Divide a fraction by a
whole number
5.NF7b. Divide a whole number
by fraction
5.NF.7c Solve real world
problems by dividing fractions
and whole numbers
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5.MD. 2 Make a like plot displaying fractions and solve problems using them 5.MD. 3 Define and understand the concept of volume.
5.MD.3a Recognize one cubic unit of volume
5.MD. 4 Measure volumes using various units
5.MD. 5 Solve volume problems using multiplication and addition 5.MD.5a Find the volume of a right rectangular prism by using models and solving equations 5.MD.5b Use formulas to find the volume of rectangular prisms 5.MD.5c Find the volume of solid figures by finding the volumes of rectangular prisms within the figure and adding the volumes together

| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 4 | Divide Fractions and and Convert Customary Units | 18-20 days |
| Essential Question | Can students represent division situations using visual fraction models and equations? Can students solve word problems involving quotients of fractions? Can students interpret and compute quotients of fractions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the | - Module 10: Understand Division with Whole Numbers and Unit Fractions <br> - Interpret a fraction as division of the numerator by the denominator $(a / b=a \div b)$. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 10, 11, |

number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10
5.NBT. 2 Use exponents to show powers of 10
5.NBT. 3 Read, write, and compare decimals to the thousandths place 5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT. 7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
5.NF. 1 Use equivalent fractions to add and subtract fractions with like and unlike denominators 5.NF. 2 Use benchmark fraction to estimate fractions. Use my understanding of fractions to decide if my answer is reasonable
fraction models or equations to represent the problem.

- Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
- Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.
- Module 11: Divide with Whole Numbers and Unit Fractions
- Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
- Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.
- Interpret division of a whole number by a unit fraction, and compute such quotients.
- Module 12: Customary Measurement
- Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m ), and use these conversions in solving multi-step, real world problems.
- Make a line plot to display a data set of measurements in fractions of a unit ( $1 / 2,1 / 4,1 / 8$ ). Use operations on fractions for this grade to solve problems involving information presented in line plots.
and 12


## Summative

- Module Tests 10, 11, and 12 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath MOY

Assessment

- Freckle MOY Benchmark


## Alternative

- Unit 4 Performance Task after Module 12
- See also integrated and modifications appendix
5.NF. 2 Solve word problems by adding and subtracting fractions with like and unlike denominators 5.NF. 3 Solve division word problems where the answer will be a fraction or a mixed number 5.NF. 4 Multiply a fraction or a whole number by a fraction 5.NF.4a Multiply a fraction or a whole number using various strategies
5.NF.4b Use various strategies to find the area of a rectangle with fraction side lengths and represent the area with a fraction 5.NF.5a Understand multiplication by comparing the sizes of the factors in related multiplication problems
5.NF.5b Use my understanding of multiplication as resizing to explain the results of multiplying numbers by fractions greater than and less than 1
5.NF.6 Solve real world problems by multiplying fractions and mixed numbers
5.NF. 7 Use understanding of division to divide fractions
5.NF.7a Divide a fraction by a whole number
5.NF7b. Divide a whole number by fraction
5.NF.7c Solve real world
problems by dividing fractions and whole numbers
5.MD. 2 Make a like plot displaying fractions and solve problems using them

> 5.MD. 3 Define and understand the concept of volume.
> 5.MD. 3 a Recognize one cubic unit of volume
> 5.MD. 4 Measure volumes using various units
> 5.MD. 5 Solve volume problems using multiplication and addition 5.MD.5a Find the volume of a right rectangular prism by using models and solving equations 5.MD.5b Use formulas to find the volume of rectangular prisms 5.MD.5c Find the volume of solid figures by finding the volumes of rectangular prisms within the figure and adding the volumes together

| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 5 | Add and Subtract Decimals | 16-18 days |
| Essential Question | Can students use standard algorithms to add, subtract, multiply, and divide multi-digit decimals? Can students evaluate expressions that include decimals? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the | - Module 13: Decimal Place Value <br> - Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1 / 10$ of what it represents in the place to its left. <br> - Read and write decimals to thousandths using base-ten | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 13 and 14 |

number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10
5.NBT. 2 Use exponents to show powers of 10
5.NBT. 3 Read, write, and compare decimals to the thousandths place 5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT. 7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
5.NF. 1 Use equivalent fractions to add and subtract fractions with like and unlike denominators 5.NF. 2 Use benchmark fraction to estimate fractions. Use my understanding of fractions to decide if my answer is reasonable
numerals, number names, and expanded form, e.g., $347.392=3 \times 100+4 \times 10+7 \times 1+3 \times(1 / 10)+9 \times$ $(1 / 100)+2 \times(1 / 1000)$.

- Use place value understanding to round decimals to any place.
- Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
- Module 14: Add and Subtract Decimals
- Add, subtract, multiply, and divide decimals to hundredths, 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.


## Summative

- Module Tests 13 and 14 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath MOY Assessment
- Freckle MOY Benchmark


## Alternative

- Unit 5 Performance Task after Module 14
- See also integrated and modifications appendix
5.NF. 2 Solve word problems by adding and subtracting fractions with like and unlike denominators 5.NF. 3 Solve division word problems where the answer will be a fraction or a mixed number 5.NF. 4 Multiply a fraction or a whole number by a fraction 5.NF.4a Multiply a fraction or a whole number using various strategies
5.NF.4b Use various strategies to find the area of a rectangle with fraction side lengths and represent the area with a fraction 5.NF.5a Understand multiplication by comparing the sizes of the factors in related multiplication problems
5.NF.5b Use my understanding of multiplication as resizing to explain the results of multiplying numbers by fractions greater than and less than 1
5.NF.6 Solve real world problems by multiplying fractions and mixed numbers
5.NF. 7 Use understanding of division to divide fractions
5.NF.7a Divide a fraction by a whole number
5.NF7b. Divide a whole number by fraction
5.NF.7c Solve real world
problems by dividing fractions and whole numbers
5.MD. 2 Make a like plot displaying fractions and solve problems using them
5.MD. 3 Define and understand the concept of volume.
5.MD.3a Recognize one cubic unit of volume
5.MD. 4 Measure volumes using various units
5.MD. 5 Solve volume problems using multiplication and addition 5.MD.5a Find the volume of a right rectangular prism by using models and solving equations 5.MD.5b Use formulas to find the volume of rectangular prisms 5.MD.5c Find the volume of solid figures by finding the volumes of rectangular prisms within the figure and adding the volumes together

| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 6 | Multiply Decimals | 10-12 days |
| Essential Question | Can students use the standard algorithm to divide multi-digit whole numbers? Can students use standard algorithms to add, subtract, multiply, and divide multi-digit decimals? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the | - Module 15: Multiply Decimals and Whole Numbers <br> - Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 . Use whole-number exponents to denote powers of 10 <br> - Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 15 and 16 <br> Summative |

decimal point when a decimal is multiplied or divided by a power of 10
5.NBT. 2 Use exponents to show powers of 10
5.NBT. 3 Read, write, and compare decimals to the thousandths place
5.NBT.3a Read, write, and compare decimals to the
thousandths place using numerals, words, and expanded form
5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT. 4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT. 7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
5.NF. 1 Use equivalent fractions to add and subtract fractions with like and unlike denominators 5.NF. 2 Use benchmark fraction to estimate fractions. Use my understanding of fractions to decide if my answer is reasonable
5.NF. 2 Solve word problems by adding and subtracting fractions with like and unlike denominators
and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

## - Module 16: Multiply Decimals

- Add, subtract, multiply, and divide decimals to hundredths, 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.
- Module Tests 15 and 16 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath EOY Assessment
- Freckle EOY Benchmark

Alternative

- Unit 6 Performance Task after Module 16
- See also integrated and modifications appendix
5.NF. 3 Solve division word problems where the answer will be a fraction or a mixed number 5.NF. 4 Multiply a fraction or a whole number by a fraction 5.NF.4a Multiply a fraction or a whole number using various strategies
5.NF.4b Use various strategies to find the area of a rectangle with fraction side lengths and represent the area with a fraction 5.NF.5a Understand multiplication by comparing the sizes of the factors in related multiplication problems
5.NF.5b Use my understanding of multiplication as resizing to explain the results of multiplying numbers by fractions greater than and less than 1
5.NF. 6 Solve real world problems
by multiplying fractions and mixed numbers
5.NF. 7 Use understanding of division to divide fractions 5.NF.7a Divide a fraction by a whole number
5.NF7b. Divide a whole number by fraction
5.NF.7c Solve real world
problems by dividing fractions and whole numbers
5.MD. 2 Make a like plot
displaying fractions and solve problems using them
5.MD. 3 Define and understand the concept of volume.
5.MD.3a Recognize one cubic

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unit of volume
5.MD.4 Measure volumes using
various units
5.MD.5 Solve volume problems
using multiplication and addition
5.MD.5a Find the volume of a
right rectangular prism by using
models and solving equations
5.MD.5b Use formulas to find the
volume of rectangular prisms
5.MD.5c Find the volume of solid
figures by finding the volumes of
rectangular prisms within the
figure and adding the volumes
together
5.G.A. }1\mathrm{ Use a pair of
perpendicular number lines,
called axes, to define a
coordinate system, with the
intersection of the lines (the
origin) arranged to coincide with
the 0 on each line and a given
point in the plane located by
using an ordered pair of numbers,
called its coordinates.
Understand that the first number
indicates how far to travel from
the origin in the direction of one
axis, and the second number
indicates how far to travel in the
direction of the second axis, with
the convention that the names of
the two axes and the coordinates
correspond (e.g., x-axis and
x-coordinate, y axis and
y-coordinate).
5.G.A.2 Represent real world and
mathematical problems by
graphing points in the first
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#### Abstract

quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. 5.OA.B. 3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. 5.O.A. 1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. 5.OA.A. 2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. 5.G.B. 3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. 5.G.B.4. Classify two-dimensional figures in a hierarchy based on properties.


| Mathematics |  | Grade \#5 |
| :---: | :--- | :--- |
| Unit 7 | Divide Decimals and Convert Metric Units | 10-12 days |
| Essential Question | Can students use the standard algorithm to divide multi-digit decimals? |  |
| Standards | Knowledge/Skills | Evidence of Learning |

5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left
5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10
5.NBT. 2 Use exponents to show powers of 10
5.NBT. 3 Read, write, and
compare decimals to the
thousandths place
5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form
5.NBT.3b Use $>,=,<$ to compare two decimals to the thousandths place based on values of the digits in each place
5.NBT.4 Round decimals to any place
5.NBT. 5 Multiply multi-digit whole numbers
5.NBT. 6 Divide up to four-digit dividends by two-digit divisors using various strategies 5.NBT. 7 Add, subtract, multiply, and divide decimals to the hundredths place, using various strategies
5.NF. 1 Use equivalent fractions to add and subtract fractions with

## - Module 17: Divide Decimals

- Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 , and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 . Use whole-number exponents to denote powers of 10 .
- Add, subtract, multiply, and divide decimals to hundredths, 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.
- Module 18: Customary and Metric Measurement
- Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m ), and use these conversions in solving multi-step, real world problems.


## Formative

- Check for Understanding (each lesson/module)
- Homework/Extra Practice (each lesson/module)
- Module Reviews 17 and 18

Summative

- Module Tests 17 and 18 (Forms A and B)
Benchmark
- Into Math Prerequisite Inventory
- IntoMath EOY Assessment
- Freckle EOY Benchmark


## Alternative

- Unit 7 Performance Task after Module 18
- See also integrated and modifications appendix

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like and unlike denominators
5.NF.2 Use benchmark fraction to
estimate fractions. Use my
understanding of fractions to
decide if my answer is
reasonable
5.NF.2 Solve word problems by
adding and subtracting fractions
with like and unlike denominators
5.NF.3 Solve division word
problems where the answer will
be a fraction or a mixed number
5.NF.4 Multiply a fraction or a
whole number by a fraction
5.NF.4a Multiply a fraction or a
whole number using various
strategies
5.NF.4b Use various strategies to
find the area of a rectangle with
fraction side lengths and
represent the area with a fraction
5.NF.5a Understand multiplication
by comparing the sizes of the
factors in related multiplication
problems
5.NF.5b Use my understanding of
multiplication as resizing to
explain the results of multiplying
numbers by fractions greater than
and less than }
5.NF.6 Solve real world problems
by multiplying fractions and mixed
numbers
5.NF.7 Use understanding of
division to divide fractions
5.NF.7a Divide a fraction by a
whole number
5.NF7b. Divide a whole number
by fraction
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5.NF.7c Solve real world
problems by dividing fractions
and whole numbers
5.MD.2 Make a like plot
displaying fractions and solve
problems using them
5.MD.3 Define and understand
the concept of volume.
5.MD.3a Recognize one cubic
unit of volume
5.MD.4 Measure volumes using
various units
5.MD.5 Solve volume problems
using multiplication and addition
5.MD.5a Find the volume of a
right rectangular prism by using
models and solving equations
5.MD.5b Use formulas to find the
volume of rectangular prisms
5.MD.5c Find the volume of solid
figures by finding the volumes of
rectangular prisms within the
figure and adding the volumes
together
5.G.A. }1\mathrm{ Use a pair of
perpendicular number lines,
called axes, to define a
coordinate system, with the
intersection of the lines (the
origin) arranged to coincide with
the 0 on each line and a given
point in the plane located by
using an ordered pair of numbers,
called its coordinates.
Understand that the first number
indicates how far to travel from
the origin in the direction of one
axis, and the second number
indicates how far to travel in the
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direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., $x$-axis and $x$-coordinate, $y$ axis and $y$-coordinate).
5.G.A. 2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
5.OA.B. 3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.
5.O.A. 1 Use parentheses,
brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
5.OA.A. 2 Write simple
expressions that record
calculations with numbers, and interpret numerical expressions without evaluating them.
5.G.B. 3 Understand that
attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
5.G.B.4. Classify two-dimensional figures in a hierarchy based on properties.

| Mathematics |  | Grade \# 5 |
| :---: | :---: | :---: |
| Unit 8 | Graphs, Patterns, and Geometry | 10-12 days |
| Essential Question | Can students understand rational numbers as points on a number line? Can students solve problems by graphing points in all four quadrants of the coordinate plane? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 5.NBT. 1 Understand that each place value is 10 times larger than the place to the right, and $1 / 10$ as large as the place to the left <br> 5.NBT. 2 Explain patterns in the number of zeros in a product when multiplying by a power of 10, and in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 <br> 5.NBT. 2 Use exponents to show powers of 10 <br> 5.NBT. 3 Read, write, and compare decimals to the thousandths place <br> 5.NBT.3a Read, write, and compare decimals to the thousandths place using numerals, words, and expanded form <br> 5.NBT.3b Use >,=, < to compare two decimals to the thousandths place based on values of the digits in each place <br> 5.NBT. 4 Round decimals to any place <br> 5.NBT. 5 Multiply multi-digit whole | - Module 19: Graphs and Patterns <br> - Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., $x$-axis and x -coordinate, y -axis and y -coordinate). <br> - Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. <br> - Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <br> - Module 20: Classify Two-Dimensional Figures <br> - Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. <br> - Classify two-dimensional figures in a hierarchy based on properties. <br> - Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 19 and 20 <br> Summative <br> - Module Tests 19 and 20 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative <br> - Unit 6 Performance Task after Module 20 <br> - See also integrated and modifications appendix |

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numbers
5.NBT.6 Divide up to four-digit
dividends by two-digit divisors
using various strategies
5.NBT.7 Add, subtract, multiply,
and divide decimals to the
hundredths place, using various
strategies
5.NF.1 Use equivalent fractions to
add and subtract fractions with
like and unlike denominators
5.NF.2 Use benchmark fraction to
estimate fractions. Use my
understanding of fractions to
decide if my answer is
reasonable
5.NF.2 Solve word problems by
adding and subtracting fractions
with like and unlike denominators
5.NF.3 Solve division word
problems where the answer will
be a fraction or a mixed number
5.NF.4 Multiply a fraction or a
whole number by a fraction
5.NF.4a Multiply a fraction or a
whole number using various
strategies
5.NF.4b Use various strategies to
find the area of a rectangle with
fraction side lengths and
represent the area with a fraction
5.NF.5a Understand multiplication
by comparing the sizes of the
factors in related multiplication
problems
5.NF.5b Use my understanding of
multiplication as resizing to
explain the results of multiplying
numbers by fractions greater than
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of that category.

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and less than 1
5.NF.6 Solve real world problems
by multiplying fractions and mixed
numbers
5.NF.7 Use understanding of
division to divide fractions
5.NF.7a Divide a fraction by a
whole number
5.NF7b. Divide a whole number
by fraction
5.NF.7c Solve real world
problems by dividing fractions
and whole numbers
5.MD.2 Make a like plot
displaying fractions and solve
problems using them
5.MD. }3\mathrm{ Define and understand
the concept of volume.
5.MD.3a Recognize one cubic
unit of volume
5.MD.4 Measure volumes using
various units
5.MD.5 Solve volume problems
using multiplication and addition
5.MD.5a Find the volume of a
right rectangular prism by using
models and solving equations
5.MD.5b Use formulas to find the
volume of rectangular prisms
5.MD.5c Find the volume of solid
figures by finding the volumes of
rectangular prisms within the
figure and adding the volumes
together
5.G.A. }1\mathrm{ Use a pair of
perpendicular number lines,
called axes, to define a
coordinate system, with the
intersection of the lines (the
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origin) arranged to coincide with
the 0 on each line and a given
point in the plane located by
using an ordered pair of numbers,
called its coordinates.
Understand that the first number
indicates how far to travel from
the origin in the direction of one
axis, and the second number
indicates how far to travel in the
direction of the second axis, with
the convention that the names of
the two axes and the coordinates
correspond (e.g., x-axis and
x-coordinate, y axis and
y-coordinate).
5.G.A.2 Represent real world and
mathematical problems by
graphing points in the first
quadrant of the coordinate plane,
and interpret coordinate values of
points in the context of the
situation.
5.OA.B.3 Generate two numerical
patterns using two given rules.
Identify apparent relationships
between corresponding terms.
Form ordered pairs consisting of
corresponding terms from the two
patterns, and graph the ordered
pairs on a coordinate plane.
5.O.A.1 Use parentheses,
brackets, or braces in numerical
expressions, and evaluate
expressions with these symbols.
5.OA.A.2 Write simple
expressions that record
calculations with numbers, and
interpret numerical expressions
```


## without evaluating them. <br> 5.G.B. 3 Understand that

attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
5.G.B.4. Classify two-dimensional figures in a hierarchy based on properties.

## Appendix A

Core Instructional Materials: IntoMath Grade 5 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online), Into Math Student Manipulatives

| Appendix B | Technology Integration Grade \# 5 |
| :---: | :---: |
| Standards |  |
| 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (6.SP.B.4) <br> 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations. 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data 9.4.8.TL.3: Select appropriate tools to organize and present information digitally. | - National Library of Virtual Manipulatives $\qquad$ <br> - Math Resources for Technology <br> https://drive.google.com/file/d/0B4Zh BcwMUEMOFRfSXZpdW9Yams/view? usp=sharing <br> - Smart Board Applications <br> - Into Math applications and online resources <br> - Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated. Some digital tools are appropriate for gathering, organizing, analyzing, and presenting information, while other types of digital tools are appropriate for creating text, visualizations, models, and communicating with others. |

- Economic, Business and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy
- Creativity \& Innovation
- Critical Thinking \& Problem Solving
- Communication \& Collaboration
- Media Literacy
- Information Literacy
- Information, Communication \& Technology
- Life \& Career Skills

STEM

- Social-Emotional Learning - Learning Mindset
- Perseverance: Checks for Understanding
- Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills.
- Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations

Treps

- TREP\$ is a 6 week educational program which empowers children by providing an engaging project-based learning experience which creatively integrates entrepreneurship education with the authentic opportunity to apply business, academic, and life skills. The benefits of teaching entrepreneurship using TREP\$ are far-reaching. Children who participate in TREP\$ provides a feeling of empowerment and confidence that comes with starting a business. During the workshops, the classroom takes on a professional environment as students are encouraged to develop leadership skills, practice critical thinking, solve problems creatively, demonstrate economic concepts, become risk takers, learn from the business community, and begin planning their own businesses. TREP\$ is a situation where it is possible for all students to succeed. TREP\$ rewards those students with passion, determination, and a strong work ethic to become entrepreneurs.

| Standards |  |
| :---: | :---: |
| 9.1.2.RM.1: Describe how valuable items might be damaged or lost and ways to protect them. 9.1.2.PB.1: Determine various ways to save and places in the local community that help people save and accumulate money over time. <br> 9.1.2.PB.2: Explain why an individual would choose to save money. <br> 9.1.2.FP.2: Differentiate between financial wants and needs. - <br> 9.1.2.FP.3: Identify the factors that influence people to spend or save (e.g., commercials, family, culture, society). <br> 9.1.2.FP.1: Explain how emotions influence whether a person spends or saves. <br> 9.1.2. FI.1: Differentiate the various forms of money and how they are used (e.g., coins, bills, checks, debit and credit cards). 9.1.2.CR.1: Recognize ways to volunteer in the classroom, school and community. • <br> 9.1.2.CR.2: List ways to give back, including making donations, volunteering, and starting a business. | Unit 1 <br> - Will use addition within 100 to solve one- and two-step word problems <br> Unit 2 <br> - Will use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to and taking from <br> Unit 3 <br> - Will understand that the three digits in a three-digit number represent hundreds, tens, and ones. <br> - Will understand that 100 is 10 tens <br> Unit 4 <br> - Will use addition and subtraction within 100 to solve various problem types <br> Unit 5 <br> - Will recognize and draw three-dimensional shapes having specified attributes <br> Unit 6 <br> - Children demonstrate their understanding of how objects can have the longest or shortest length in a group of objects. This objective focuses on the lengths of three objects. Children can order the three objects longest to shortest or the reverse. <br> Core ideas: <br> - You can give back in areas that matter to you. <br> - There are benefits to having a positive credit history. <br> - Taxes are collected on a variety of goods and services at the local, state, and federal levels. <br> - There is a broader economic system that influences your financial goals. <br> - There are agencies, laws, and resources to protect individuals as consumers. <br> - People can choose to save money in many places such as home in a piggy bank, bank, or credit union. <br> - An individual's financial traits and habits affect his/her finances. <br> - Spending choices and their intended and unintended consequences impact financial outcomes and |


|  | personal wellbeing. <br> - <br> - <br> Not all financial information is accurate or truthful. <br> Indiduals can choose to accept inevitable risk or take steps to protect themselves by avoiding or <br> reducing risk. |
| :--- | :--- |
|  | Planning and Budgeting: <br> - There are specific steps associated with creating a budget. <br> - Saving money can impact an individual's ability to address emergencies and accomplish their <br> short-and long-term goals. |
|  |  |


| Grade 6 - Mathematics <br> Pacing Guide |  |  |
| :--- | :--- | :--- |
| Trimester 1 (September - December) | Trimester 2 (December - March) | Trimester 3 (March - June) |
| Unit 1: Number Systems and Operations <br> Unit 2: Ratio and Rate Reasoning | Unit 3: Expressions, Equations, and <br> Inequalities <br> Unit 4: Relationships in Geometry | Unit 5: Data Collection and Analysis |


| Mathematics |  | Grade 6 |
| :---: | :---: | :---: |
|  | Unit 1: Number Systems and Operations | Pacing: 24-32 Days |
| Essential Questions | - How are opposite and negative numbers used in real-world contexts? <br> - What is the difference between an integer and a rational number? <br> - How do I apply the order of operations in complex, multi step problems? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 6.NS.A.1: Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem <br> 6.NS.B: Compute fluently with multi-digit numbers and find common factors and multiples. <br> 6.NS.B.2: Fluently divide multi-digit numbers using the standard algorithm. <br> 6.NS.B.3: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. <br> 6.NS.B.4: Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole | Module 1: Integer Concepts <br> - Identify and interpret integers using a number line. <br> - Use number lines to compare and order integers. <br> - Find and use absolute value in real-world situations. <br> - New Vocabulary: integers, negative number, opposites, positive number, inequality, absolute value <br> Module 2: Rational Number Concepts <br> - Graph rational numbers on vertical and horizontal number lines. <br> - Compare rational numbers using a number line. <br> - Compare rational numbers using the GCF and LCM. <br> - Use strategies to order rational numbers. <br> - New Vocabulary: rational number, greatest common factor, least common multiple <br> Module 3: Fraction Division <br> - Divide fractions with the same denominators. <br> - Divide fractions with unlike denominators. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 1, 2, 3, 4 <br> Summative <br> - Module Tests 1, 2, 3, 4 (Forms A and B) <br> Benchmark <br> - Into Math Prerequisite Inventory <br> - IntoMath BOY Assessment <br> - Freckle BOY Benchmark <br> Alternative |

numbers less than or equal to 12.
Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor.
6.NS.C.5: Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above /below zero, elevation above/below sea level, credits/debits, positive /negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
6.NS.C.6a: Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3)=3$, and that 0 is its own opposite. 6.NS.C.6b: Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
6.NS.C.6c: Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS.C.7b: Write, interpret, and explain statements of order for rational numbers in real-world

- Divide fractions and mixed numbers.
- Use LCM and GCF to add, subtract, multiply, and divide fractions.
- Review Vocabulary: dividend, divisor, expression, quotient, denominator, numerator, Review Vocabulary: rectangle, simplify
- New Vocabulary: multiplicative inverse, reciprocal, simplest form


## Module 4: Fluency with Multi-Digit Decimal Operations

- Add and subtract multi-digit decimals.
- Multiply multi-digit decimals.
- Divide multi-digit whole numbers using the standard algorithm.
- Solve real-world problems involving operations with multi- digit decimals.
- Review Vocabulary: remainder
- Review Vocabulary: equivalent
- Unit 1 Performance Task after Module 4
- See also integrated and modifications appendix


## contexts.

6.NS.C.7c: Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.
6.NS.C.7d: Distinguish comparisons of absolute value from statements about order.

| Mathematics |  | Grade 6 |
| :---: | :---: | :---: |
|  | Unit 2: Ratio and Rate Reasoning | Pacing: 20-23 days |
| Essential Questions | How do you recognize and represent proportional relationships between quantities? How do you apply proportions? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 6.RP.A.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <br> 6.RP.A.2: Understand the concept of a unit rate $a l b$ associated with a ratio $a: b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <br> 6.RP.A.3: Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. <br> 6.RP.A.3a: Make tables of equivalent ratios relating quantities with whole number measurements, | Module 5: Ratios and Rates <br> - Understand and write ratios. <br> - Learn to use tables and graphs to represent ratios and rates. <br> - Use a table or double number lines to compare ratios and rates. <br> - Find and use unit rates to solve problems. <br> - Use equivalent ratios to solve real-world problems <br> - New Vocabulary: ratio, equivalent ratios, rate, unit rate <br> - Review Vocabulary: point <br> Module 6: Apply Ratios and Rates to Measurement <br> - Apply ratio reasoning to make and interpret circle graphs. <br> - Convert units within a measurement system. <br> - Use equivalent ratios to convert measurements between measurement systems. <br> - Review Vocabulary: circle <br> - New Vocabulary: circle graph, conversion factor, customary system, metric system | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 5, 6, 7 <br> Summative <br> - Module Tests 5, 6, 7 (Forms A and B) <br> Benchmark <br> - MClass Assessment <br> - Freckle Benchmark <br> Alternative <br> - Unit 2 Performance Task after Module 7 |

find missing values in the
6.RP.A.3b: Solve unit rate problems including those involving unit pricing and constant speed.

## Module 7: Understand and Apply Percent

- Write a ratio as a percent.
- Find a percent of a quantity.
- Use percents to solve real-world problems.
- New Vocabulary: percent
- See also integrated and modifications appendix

| Mathematics |  | Grade 6 |
| :---: | :---: | :---: |
|  | Unit 3: Expressions, Equations, and Inequalities | Pacing: 24-27 days |
| Essential Questions | - How do powers affect numbers? <br> - How can order of operations, the distributive property, and combining like terms help solve an algebraic equation? <br> - How can an algebraic expression help me solve a real-world application problem? <br> - How can an equation or inequality can be used to represent a given situation? <br> - How is solving an inequality similar to solving an equation? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 6.EE.A.1: Write and evaluate numerical expressions involving whole-number exponents. <br> 6.EE.A.2a: Write expressions that record operations with numbers and with letters standing for numbers. 6.EE.A.2b: Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <br> 6.EE.A.2c: Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those | Module 8: Numerical and Algebraic Expressions <br> - Write and find the value of expressions involving exponents. <br> - Write and evaluate numerical expressions. <br> - Write an algebraic expression to represent a situation. <br> - Interpret and evaluate an algebraic expression. <br> - Identify and generate equivalent expressions. <br> - New Vocabulary: base, exponent, evaluate, numerical expression, term, algebraic expression, coefficient, constant, variable, equivalent expression, like terms <br> - Review Vocabulary: Distributive Property, order of operations, perimeter, Associative Property of Addition, Associative Property of Multiplication, Commutative Property of Addition, Commutative Property of Multiplication, triangle. <br> Module 9: Numerical and Algebraic Expressions <br> - Model and write an equation to represent a situation. <br> - Solve equations that contain addition and subtraction. | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 8, 9, 10 <br> Summative <br> - Module Tests 8, 9, 10 (Forms A and B) <br> Benchmark <br> - MClass Assessment <br> - Freckle Benchmark <br> Alternative <br> - Unit 3 Performance Task after Module 10 |

involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of
Operations).
6.EE.A.3: Apply the properties of operations to generate equivalent expressions.
6.EE.A.4: Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).
6.EE.B.5: Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
6.EE.B.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
6.EE.B.7: Solve real-world and mathematical problems by writing and solving equations of the form $x$ $+p=q$ and $p x=q$ for cases in which $p, q$ and $x$ are all nonnegative rational numbers.
6.EE.B.8: Write an inequality of the form $x>c$ or $x<c$ to represent a constraint or condition in a realworld or mathematical problem. Recognize that inequalities of the form $x>c$ or $x<c$ have infinitely many solutions; represent solutions

- Solve equations that contain multiplication and division.
- Write and use equations to represent situations and solve problems.
- Write and graph inequalities to represent real-world situations.
- New Vocabulary: equation, solution of an equation, Addition Property of Equality, Subtraction Property of Equality, Division Property of Equality, Multiplication Property of Equality, constraint, inequality, solution of an inequality
- Review Vocabulary: angle, degree


## Module 10: Real World Relationships Between Variables

- Represent an equation in a table or graph.
- Write an equation given a verbal description of a relationship.
- Write an equation using a table or graph.
- New Vocabulary: dependent variable, independent variable
- See also integrated and modifications appendix


## of such inequalities on number line

 diagrams.6.EE.C.9: Use variables to
represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.

| Mathematics |  | Grade 6 |
| :---: | :---: | :---: |
|  | Unit 4: Relationships in Geometry | Pacing: 26-29 |
| Essential Questions | - Is it possible to find the perimeter and/or area of an irregular figure? <br> - How do I utilize given formulas to calculate surface area and volume? |  |
| Standards | Knowledge/Skills | Evidence of Learning |
| 6.G.A: Solve real-world and mathematical problems involving area, surface area, and volume. 6.G.A.1: Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. <br> 6.G.A.2: Find the volume of a right rectangular prism with fractional | Module 11: Polygons on the Coordinate Plane <br> - Locate rational ordered pairs on the coordinate plane. <br> - Solve problems by graphing and identifying polygons in the coordinate plane. <br> - Use absolute value to find the distance between two points with the same $x$ - or $y$-coordinate. <br> - Find the perimeter and area of polygons on the coordinate plane. <br> - New Vocabulary: coordinate plane, ordered pair, origin, quadrant, x-axis, y-axis, polygon, vertex, reflection <br> - Review Vocabulary: axes, coordinates, rectangle, x-coordinate, $y$-coordinate, hexagon, isosceles triangle, pentagon, quadrilateral, right angle, right triangle, transformation, area, base, height | Formative <br> - Check for Understanding (each lesson/module) <br> - Homework/Extra Practice (each lesson/module) <br> - Module Reviews 11, 12, 13 <br> Summative <br> - Module Tests 11, 12, 13 (Forms A and B) <br> Benchmark <br> - MClass Assessment <br> - Freckle Benchmark |

edge lengths by packing it with unit cubes of the appropriate unit
fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V=l w h$ and $V=B h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
6.G.A.3: Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
6.G.A.4: Represent
three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

## Module 12: Area of Triangles and Special Quadrilaterals

- Find the area of parallelograms.
- Find the area of triangles.
- Find the area of trapezoids.
- Find the area of composite figures.
- New Vocabulary: base of a triangle, diagonal, height of a triangle, base of a trapezoid, height of a trapezoid, trapezoid, composite figure.
- Review Vocabulary: base of a parallelogram, height of a parallelogram, parallelogram.


## Module 13: Surface Area and Volume

- Use nets to find surface area.
- Find the volume of a rectangular prism.
- Write equations to solve problems involving volume of rectangular prisms.
- New Vocabulary: net, pyramid, surface area,
- Review Vocabulary: solid figure, volume


## Alternative

- Unit 4 Performance Task after Module 13
- See also integrated and modifications appendix

| Mathematics |  | Grade 6 |
| :---: | :---: | :---: |
|  | Unit 5: Data Collection and Analysis | Pacing: 20-24 |
| Essential Questions | $\bullet$ What kind of information can we get from different types of graphs? |  |
| Standards | How can the mean, median, mode, and range be used to describe the shape of the data? |  |
| Knowledge/Skills | Evidence of Learning |  |
| 6.SP.A: Develop understanding of | Module 14: Data Collection and Displays | Formative |

## statistical variability.

6.SP.A.1: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
6.SP.A.2: Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
6.SP.A.3: Recognize that a measure of center for a numerical data set summarizes all of its
values with a single number, while a measure of variation describes how its values vary with a single number.

## 6.SP.B

Summarize and describe distributions.
6.SP.B. 4

Display numerical data in plots on a number line, including dot plots, histograms, and box plots.

## 6.SP.B. 5

Summarize numerical data sets in relation to their context, such as by: 6.SP.B.5a

Reporting the number of observations.
6.SP.B.5b

Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

## 6.SP.B.5c

Giving quantitative measures of center (median and/or mean) and

- Identify a statistical question and describe data.
- Use dot plots to display data.
- Make histograms and frequency tables to display data.
- New Vocabulary: data, statistical question, dot plot, frequency, frequency table, histogram
- Review Vocabulary: set, line plot, bar graph, interval.


## Module 15: Measures of Center

- Understand how fair share and balance point are related to the mean.
- Describe a set of data using mean, median, and mode.
- Choose an appropriate measure of center to describe a data set.
- New Vocabulary: average, mean, measure of center, median, mode, outlier


## Module 16: Variability and Data Distribution

- Describe overall patterns in a data set.
- Use box plots to display data.
- Determine and use the mean absolute deviation of a set of data values.
- Summarize a set of data by using range, interquartile range, and mean absolute deviation.
- Describe the distribution of a data set collected to answer a statistical question.
- New Vocabulary: box plot, lower quartile, upper quartile, mean absolute deviation (MAD), interquartile range (IQR), measure of variability, range
- Check for Understanding (each lesson/module)
- Homework/Extra Practice (each lesson/module)

Summative

- Module Tests 14, 15, 16 (Forms A and B)
Benchmark
- MClass Assessment
- Freckle Benchmark

Alternative

- Unit 5 Performance Task after Module 16
- See also integrated and modifications appendix
variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
6.SP.B.5d

Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

## Appendix A

Core Instructional Materials: IntoMath Grade 6 Curriculum, Houghton-Mifflin (consumable book, online access)
Supplemental Materials: Freckle by Renaissance, Khan Academy (online) Escape Room Activities

| Appendix B | Interdisciplinary Connections |
| :--- | :--- |
| STEM | Grade \# |
| - Unit 1 Performance Task: Cocoa Costs - Design an Event (after Module 4) |  |
| - Unit 2 Performance Task: Record Deal Ratios (after Module 7) |  |
| - Unit 3 Performance Task: Art in Expression (after Module 10) |  |
| - Unit 4 Performance Task: Brand/Logo Design (after Module 13) |  |
| - Unit 5 Performance Task: The Right Price - Design a Fundraiser (after Module 16) |  |
| Social-Emotional Learning - Learning Mindset |  |
| - Perseverance: Checks for Understanding |  |
| - Understanding Mindset Beliefs - students to give examples of skills that are built on previously acquired skills. |  |
| - Developing Growth Mindset Behaviors - students share strategies they use to connect new concepts to their prior knowledge |  |

ELA

- Language Development
- provide opportunities for students to listen for, and speak, read, and write about mathematical situations
- develop understanding of both mathematical language and concepts.

ART

- Unit 3 Performance Task: Art in Expression (after Module 10)

| Appendix C | Technology Integration (Computer Science and Design Thinking) |
| :---: | :---: |
| Standards |  |
| 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (6.SP.B.4) <br> 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations. 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data <br> 9.4.8.TL.3: Select appropriate tools to organize and present information digitally. | Statistics and Probability <br> - Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated. <br> - Some digital tools are appropriate for gathering, organizing, analyzing, and presenting information, while other types of digital tools are appropriate for creating text, visualizations, models, and communicating with others. |


| Appendix D |  | Career Education Integration |
| :--- | :--- | :--- |$\quad$ Grade 6

potential increase in income from a career of choice.
9.2.8.CAP.7: Devise a strategy to minimize costs of postsecondary education.
9.2.8.CAP.8: Compare education and training requirements, income potential, and primary duties of at least two jobs of interest.
9.2.8.CAP.9: Analyze how a variety of activities related to career preparation (e.g., volunteering, apprenticeships, structured learning experiences, dual enrollment, job search, scholarships) impacts postsecondary options.
9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.

- There are strategies to increase your savings and limit debt.
- Credit management includes making informed choices about sources of credit and requires an understanding of the cost of credit.
- There are strategies to build and maintain a good credit history.
- Credit history affects personal finances.
- Financial Institutions:
- There are a variety of factors that influence how well suited a financial institution and/or service will be in meeting an individual's financial needs.
- Career Awareness and Planning:
- An individual's strengths, lifestyle goals, choices, and interests affect employment and income.
- Early planning can provide more options to pay for postsecondary training and employment.
- Career planning requires purposeful planning based on research, self-knowledge, and informed choices.

|  | ELA | MATH | SCI | SS | HLTH \& PE | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPECIAL EDUCATION | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| CONTENT/MATERIAL |  |  |  |  |  |  |  |
| Access to accurate notes | Y | Y | Y | Y | Y | Y | Y |
| Provide copy of class notes | Y | Y | Y | Y | Y | Y | Y |
| Additional time to complete tasks/long-term projects with adjusted due dates | Y | Y | Y | Y | Y | Y | Y |
| Adjust number of items student is expected to complete | Y | Y | Y | Y | Y | Y | Y |
| Limit number of items student is expected to learn at one time | Y | Y | Y | Y | Y | Y | Y |
| Allow extra time for task completion | Y | Y | Y | Y | Y | Y | Y |
| Allow verbal rather than written responses | Y | Y | Y | Y | Y | Y | Y |
| Modify curriculum content based on student's ability level | Y | Y | Y | Y | Y | Y | Y |
| Reduce readability level of materials | Y | Y | Y | Y | Y | Y | Y |
| Allow typed rather than handwritten responses | Y | Y | Y | Y | Y | Y | Y |
| Use of calculator | N/A | Y | Y | Y | Y | Y | N/A |
| Use of a math grid | N/A | Y | Y | Y | Y | Y | N/A |
| Access to electronic text (e.g. Downloaded books) | Y | Y | Y | Y | Y | Y | Y |
| Provide books on tape, CD or read aloud computer software | Y | Y | Y | Y | Y | Y | Y |
| Modified homework assignments (modify content, modify amount, as appropriate) | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| ORGANIZATION |  |  |  |  |  |  |  |
| Assistance with organization of planner/schedule | Y | Y | Y | Y | Y | Y | Y |
| Assistance with organization of materials/notebooks | Y | Y | Y | Y | Y | Y | Y |
| Use a consistent daily routine | Y | Y | Y | Y | Y | Y | Y |
| Assist student in setting short-term goals | Y | Y | Y | Y | Y | Y | Y |
| Break down tasks into manageable units | Y | Y | Y | Y | Y | Y | Y |


| SPECIAL EDUCATION | ELA | MATH | SCI | SS | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Provide benchmarks for long-term assignments and/or projects | Y | Y | Y | Y | Y | Y | Y |
| Use of checklists | Y | Y | Y | Y | Y | Y | Y |
| Use of an assignment notebook or planner | Y | Y | Y | Y | Y | Y | Y |
| Check homework on a daily basis | Y | Y | Y | Y | Y | Y | Y |
| Provide timelines for work completion | Y | Y | Y | Y | Y | Y | Y |
| Develop monthly calendars with assignment due dates marked | Y | Y | Y | Y | Y | Y | Y |
| Provide organizational support through teacher websites | Y | Y | Y | Y | Y | Y | Y |
| Enlarge work space areas | Y | Y | Y | Y | Y | Y | Y |
| Provide organizers/study guides | Y | Y | Y | Y | Y | Y | Y |
| Require classroom notebooks and/or folders | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| INSTRUCTION |  |  |  |  |  |  |  |
| Frequently check for understanding | Y | Y | Y | Y | Y | Y | Y |
| Color code important information | Y | Y | Y | Y | Y | Y | Y |
| Simplify task directions | Y | Y | Y | Y | Y | Y | Y |
| Provide hands-on learning activities | Y | Y | Y | Y | Y | Y | Y |
| Provide modeling | Y | Y | Y | Y | Y | Y | Y |
| Provide guided instruction | Y | Y | Y | Y | Y | Y | Y |
| Modify pace of instruction to allow additional processing time | Y | Y | Y | Y | Y | Y | Y |
| Provide small group instruction | Y | Y | Y | Y | Y | Y | Y |
| Present information via the visual modality(written material to supplement oral explanation, models, illustrations, assignments written on board) | Y | Y | Y | Y | Y | Y | Y |
| Provide outline in advance of lecture | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | HLTH \& PE | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPECIAL EDUCATION | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Demonstrate directions and provide a model or example of completed task | Y | Y | Y | Y | Y | Y | Y |
| Emphasize multi-sensory presentation of data | Y | Y | Y | Y | Y | Y | Y |
| Encourage use of mnemonic devices | Y | Y | Y | Y | Y | Y | Y |
| Provide oral as well as written instructions/directions | Y | Y | Y | Y | Y | Y | Y |
| Allow for repetition and/or clarification of directions, as needed | Y | Y | Y | Y | Y | Y | Y |
| Reinforce visual directions with verbal cues | Y | Y | Y | Y | Y | Y | Y |
| Give direct and uncomplicated directions | Y | Y | Y | Y | Y | Y | Y |
| Orient to task and provide support to complete task | Y | Y | Y | Y | Y | Y | Y |
| Provide easier tasks first | Y | Y | Y | Y | Y | Y | Y |
| Help to develop metacognitive skills (self-talk and self-correction) | Y | Y | Y | Y | Y | Y | Y |
| Directions repeated, clarified or reworded | Y | Y | Y | Y | Y | Y | Y |
| Have student demonstrate understanding of instructions/task before beginning assignment | Y | Y | Y | Y | Y | Y | Y |
| Allow wait time for processing before calling on student for response | Y | Y | Y | Y | Y | Y | Y |
| Read directions aloud | $Y$ | Y | Y | Y | Y | Y | Y |
| Administer work in small segments | Y | Y | Y | Y | Y | Y | Y |
| Provide visual models of completed tasks | Y | Y | Y | Y | Y | Y | Y |
| Give verbal as well as written directions | Y | Y | Y | Y | Y | Y | Y |
| Use interests to increase motivation | Y | Y | Y | Y | Y | Y | Y |
| Use marker (e.g. index card, ruler) for visual tracking | Y | Y | Y | Y | Y | Y | Y |
| Enlarge print | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| ASSESSMENT |  |  |  |  |  |  |  |
| Modified grading | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPECIAL EDUCATION | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Additional time to complete classroom tests/quizzes | Y | Y | Y | Y | Y | Y | Y |
| Announce test with adequate prep time | Y | Y | Y | Y | Y | Y | Y |
| Small group administration of classroom tests/quizzes | Y | Y | Y | Y | Y | Y | Y |
| Provide larger white work space on quizzes and tests, particularly in math | Y | Y | Y | Y | Y | Y | Y |
| Modified tests/quizzes | Y | Y | Y | Y | Y | Y | Y |
| Modify the number of choices on tests/quizzes | Y | Y | Y | Y | Y | Y | Y |
| Modify length of test | Y | Y | Y | Y | Y | Y | Y |
| Modify the content of tests/quizzes | Y | Y | Y | Y | Y | Y | Y |
| Adjust test format to student's ability level | Y | Y | Y | Y | Y | Y | Y |
| Provide manipulative examples | Y | Y | Y | Y | Y | Y | Y |
| Develop charts, visual outlines, diagrams, etc. | Y | Y | Y | Y | Y | Y | Y |
| Verbally guide student through task steps | Y | Y | Y | Y | Y | Y | Y |
| Allow for oral rather than written responses on tests | Y | Y | Y | Y | Y | Y | Y |
| Allow for oral follow-up for student to expand on written response | Y | Y | Y | Y | Y | Y | Y |
| Allow use of a computer | Y | Y | Y | Y | Y | Y | Y |
| Provide a word bank for fill-in-the blank tests | Y | Y | Y | Y | Y | Y | Y |
| Allow dictated responses in lieu of written responses | Y | Y | Y | Y | Y | Y | Y |
| Do not penalize for spelling errors | Y | Y | Y | Y | Y | Y | Y |
| Allow typed rather than handwritten responses | Y | Y | Y | Y | Y | Y | Y |
| Allow student to circle responses directly on test rather than use Scantron | Y | Y | Y | Y | Y | Y | Y |
| Provide word banks for recall tests | Y | Y | Y | Y | Y | Y | Y |
| Read test aloud | Y | Y | Y | Y | Y | Y | Y |
| Allow student to make test corrections for credit | Y | Y | Y | Y | Y | Y | Y |


| SPECIAL EDUCATION | ELA | MATH | SCI | SS | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Mark answers in test booklet | Y | Y | Y | Y | Y | Y | Y |
| Point to response | Y | Y | Y | Y | Y | Y | Y |
| Alternate test-taking site | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| ATTENTION/FOCUS |  |  |  |  |  |  |  |
| Seat student near front of room | Y | Y | Y | Y | Y | Y | Y |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Monitor on-task performance | Y | Y | Y | Y | Y | Y | Y |
| Arrange private signal to cue student to off-task behavior | Y | Y | Y | Y | Y | Y | Y |
| Establish and maintain eye contact when giving oral directions | Y | Y | Y | Y | Y | Y | Y |
| Stand in proximity to student to focus attention | Y | Y | Y | Y | Y | Y | Y |
| Provide short breaks when refocusing is needed | Y | Y | Y | Y | Y | Y | Y |
| Use study carrel | Y | Y | Y | Y | Y | Y | Y |
| Arrange physical layout to limit distractions | Y | Y | Y | Y | Y | Y | Y |
| Frequently ask questions to engage student | Y | Y | Y | Y | Y | Y | Y |
| Refocusing and redirection | Y | Y | Y | Y | Y | Y | Y |
| Behavior/time management system | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| WRITTEN LANGUAGE |  |  |  |  |  |  |  |
| Include brainstorming as a pre-writing activity | Y | Y | Y | Y | Y | Y | Y |
| Edit written work with teacher guidance | Y | Y | Y | Y | Y | Y | Y |
| Allow use of word processor | Y | Y | Y | Y | Y | Y | Y |
| Use graphic organizers | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |


| SPECIAL EDUCATION | ELA | MATH | SCI | SS | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | WRLD LANG | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| SOCIAL/BEHAVIORAL |  |  |  |  |  |  |  |
| Discuss behavioral issues privately with student | Y | Y | Y | Y | Y | Y | Y |
| Provide opportunities for peer interactions | Y | Y | Y | Y | Y | Y | Y |
| Utilize student in development of tasks/goals | Y | Y | Y | Y | Y | Y | Y |
| Encourage student to self-advocate | Y | Y | Y | Y | Y | Y | Y |
| Minimize negative behavior | Y | Y | Y | Y | Y | Y | Y |
| Present alternatives to negative behavior | Y | Y | Y | Y | Y | Y | Y |
| Establish positive scripts | Y | Y | Y | Y | Y | Y | Y |
| Desensitize student to anxiety causing events | Y | Y | Y | Y | Y | Y | Y |
| Monitor for overload, excess stimuli | Y | Y | Y | Y | Y | Y | Y |
| Identify triggers | Y | Y | Y | Y | Y | Y | Y |
| Help student manage antecedents | Y | Y | Y | Y | Y | Y | Y |
| Develop signal for when break is needed | Y | Y | Y | Y | Y | Y | Y |
| Give student choices to allow control | Y | Y | Y | Y | Y | Y | Y |
| Provide positive reinforcement | Y | Y | Y | Y | Y | Y | Y |
| Provide consistent praise to elevate self-esteem | Y | Y | Y | Y | Y | Y | Y |
| Model and role play problem solving | Y | Y | Y | Y | Y | Y | Y |
| Provide counseling | Y | Y | Y | Y | Y | Y | Y |
| Use social skills group to teach skills and provide feedback | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | WRLD LANG | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH LANGUAGE LEARNERS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| GRADING |  |  |  |  |  |  |  |
| Standard Grades vs Pass/Fail | Y | Y | Y | Y | Y | Y | Y |
| CONTINUUM OF ENGLISH LANGUAGE DEVELOPMENT |  |  |  |  |  |  |  |
| PreK-K WIDA CAN DO Descriptors | Y | Y | Y | Y | Y | Y | Y |
| Grades 1-2 WIDA CAN DO Descriptors | Y | Y | Y | Y | Y | Y | Y |
| Grades 3-5 WIDA CAN DO Descriptors | Y | Y | Y | Y | Y | Y | Y |
| Grades 6-8 WIDA CAN DO Descriptors | Y | Y | Y | Y | Y | Y | Y |
| SIOP COMPONENTS AND FEATURES |  |  |  |  |  |  |  |
| PREPARATION |  |  |  |  |  |  |  |
| Write content objectives clearly for students | Y | Y | Y | Y | Y | Y | Y |
| Write language objectives clearly for students | Y | Y | Y | Y | Y | Y | Y |
| Choose content concepts appropriate for age and educational background levels of students | Y | Y | Y | Y | Y | Y | Y |
| Identify supplementary materials to use | Y | Y | Y | Y | Y | Y | Y |
| Adapt content to all levels of students proficiency | Y | Y | Y | Y | Y | Y | Y |
| Plan meaningful activities that integrate lesson concepts with language practices opportunities for reading, writing, listening, and/or speaking | Y | Y | Y | Y | Y | Y | Y |
| BUILDING BACKGROUND |  |  |  |  |  |  |  |
| Explicitly link concepts to students' backgrounds and experiences | Y | Y | Y | Y | Y | Y | Y |
| Explicitly link past learning and new concepts | Y | Y | Y | Y | Y | Y | Y |
| Emphasize key vocabulary for students | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | WRLD LANG | HLTH \& PE | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH LANGUAGE LEARNERS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
|  | Y | Y | Y | Y | Y | Y | Y |
| COMPREHENSIBLE INPUT |  |  |  |  |  |  |  |
| Use speech appropriate for students' proficiency level | Y | Y | Y | Y | Y | Y | Y |
| Explain academics tasks clearly | Y | Y | Y | Y | Y | Y | Y |
| Use a variety of techniques to make content concepts clear (e.g. modeling, visuals, hands-on activities, demonstrations, gestures, body language) | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| STRATEGIES |  |  |  |  |  |  |  |
| Provide ample opportunities for students to use strategies (e.g. problem solving, predicting, organizing, summarizing, categorizing, evaluating, self-monitoring) | Y | Y | Y | Y | Y | Y | Y |
| Use scaffolding techniques consistently throughout lesson | Y | Y | Y | Y | Y | Y | Y |
| Use a variety of question types including those that promote higher-order thinking skills throughout the lesson | Y | Y | Y | Y | Y | Y | Y |
| INTERACTION |  |  |  |  |  |  |  |
| Provide frequent opportunities for interaction and discussion between teacher/students and among students about lessons concepts, and encourage elaborated responses | Y | Y | Y | Y | Y | Y | Y |
| Use group configurations that support language and content objectives of the lesson | Y | Y | Y | Y | Y | Y | Y |
| Provide sufficient wait time for student responses consistently | Y | Y | Y | Y | Y | Y | Y |
| Give ample opportunities for students to clarify key concepts in LI as needed with aide, peer, or LI text | Y | Y | Y | Y | Y | Y | Y |
| PRACTICE/APPLICATION |  |  |  |  |  |  |  |


|  | ELA | MATH | SCl | SS | WRLD LANG | HLTH \& PE | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH LANGUAGE LEARNERS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Provide hands-on materials and/ manipulatives for students to practice using new content knowledge | Y | Y | Y | Y | Y | Y | Y |
| Provide activities for students to apply content and language knowledge in the classroom | Y | Y | Y | Y | Y | Y | Y |
| Provide activities that integrate all language skills | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| LESSON DELIVERY |  |  |  |  |  |  |  |
| Support content objectives clearly | Y | Y | Y | Y | Y | Y | Y |
| Support language objectives clearly | Y | Y | Y | Y | Y | Y | Y |
| Engage students approximately 90-100\% of the period | Y | Y | Y | Y | Y | Y | Y |
| Pace the lesson appropriately to the students' ability level | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| REVIEW/EVALUATION |  |  |  |  |  |  |  |
| Give a comprehensive review of key vocabulary | Y | Y | Y | Y | Y | Y | Y |
| Give a comprehensive review of key content concepts | Y | Y | Y | Y | Y | Y | Y |
| Provide feedback to students regularly on their output | Y | Y | Y | Y | Y | Y | Y |
| Conduct assessments of students comprehension and learning throughout lesson and all lesson objectives | Y | Y | Y | Y | Y | Y | Y |


| STUDENTS AT RISK OF SCHOOL FAILURE (I\&RS Resource | ELA | MATH | SCI | SS | WRLD LANG | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manual) | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| ACADEMICS |  |  |  |  |  |  |  |
| Provide necessary services (Lit Support, Math Support, OT, PT, speech, etc.) | Y | Y | Y | Y | Y | Y | Y |
| Prompt before directions/questions are verbalized with visual cue between teacher and student | Y | Y | Y | Y | Y | Y | Y |
| Task list laminated and placed on desk for classroom routines and organization | Y | Y | Y | Y | Y | Y | Y |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Provide structure and positive reinforcements | Y | Y | Y | Y | Y | Y | Y |
| Sustained working time connected to reward (If/Then statement) | Y | Y | Y | Y | Y | Y | Y |
| Frequently check for understanding | Y | Y | Y | Y | Y | Y | Y |
| Graphic organizers | Y | Y | Y | Y | Y | Y | Y |
| Tracker | Y | Y | Y | Y | Y | Y | Y |
| Slant board | Y | Y | Y | Y | Y | Y | Y |
| Access to accurate notes | Y | Y | Y | Y | Y | Y | Y |
| Additional time to complete tasks/long-term projects with adjusted due dates | Y | Y | Y | Y | Y | Y | Y |
| Limit number of items student is expected to learn at one time | Y | Y | Y | Y | Y | Y | Y |
| Break down tasks into manageable units | Y | Y | Y | Y | Y | Y | Y |
| Directions repeated, clarified, or reworded | Y | Y | Y | Y | Y | Y | Y |
| Frequent breaks during class | Y | Y | Y | Y | Y | Y | Y |
| Allow verbal rather than written responses | Y | Y | Y | Y | Y | Y | Y |
| Modify curriculum content based on student's ability level | Y | Y | Y | Y | Y | Y | Y |
| Reduce readability level of materials | Y | Y | Y | Y | Y | Y | Y |
| Allow typed rather than handwritten responses | Y | Y | Y | Y | Y | Y | Y |
| Use of calculator | N/A | Y | Y | Y | Y | Y | N/A |


| STUDENTS AT RISK OF SCHOOL FAILURE (I\&RS Resourc | ELA | MATH | SCI | SS | WRLD LANG | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manual) | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Use of a math grid | N/A | Y | Y | Y | Y | Y | N/A |
| Provide models/organizers to break down independent tasks | Y | Y | Y | Y | Y | Y | Y |
| Access to electronic text (e.g. Downloaded books) | Y | Y | Y | Y | Y | Y | Y |
| Provide books on tape, CD, or read aloud computer software | Y | Y | Y | Y | Y | Y | Y |
| Provide opportunities for using a Chromebook as well as assistive technologies | Y | Y | Y | Y | Y | Y | Y |
| Provide buddy system | Y | Y | Y | Y | Y | Y | Y |
| Adjust activity, length of assignment, and/or number of problems, including homework | Y | Y | Y | Y | Y | Y | Y |
| Provide assessments in a small group setting | Y | Y | Y | Y | Y | Y | Y |
| Educate/train relevant staff with regards to the signs/symptoms, promote tolerance of needs, and/or providing assistance | Y | Y | Y | Y | Y | Y | Y |
| Communication with parents | Y | Y | Y | Y | Y | Y | Y |
| Gradual release of responsibility related to writing prompts (Proximity, Sentence Starter, Attempt independently) | Y | N/A | Y | Y | Y | Y | Y |
| Rubric-based checklist | Y | Y | Y | Y | Y | Y | Y |
| Target specific number of details and focus on organization with post-its | Y | Y | Y | Y | Y | Y | Y |
| Accept late work/homework without penalty | Y | Y | Y | Y | Y | Y | Y |
| Previewing material (access to PowerPoint slides, novels, syllabus, study guides when available) | Y | Y | Y | Y | Y | Y | Y |
| SOCIAL/EMOTIONAL |  |  |  |  |  |  |  |
| Children's books addressing presenting problem | Y | Y | Y | Y | Y | Y | Y |
| Student jots down presenting problem and erase when it goes away | Y | Y | Y | Y | Y | Y | Y |
| Meet with social worker | Y | Y | Y | Y | Y | Y | Y |


| STUDENTS AT RISK OF SCHOOL FAILURE (I\&RS Resource | ELA | MATH | SCI | SS | WRLD LANG | HLTH \& PE | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manual) | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Student jots down presenting problem and erase when it goes away | Y | Y | Y | Y | Y | Y | Y |
| Utilize nurse during episodes of presenting problem | Y | Y | Y | Y | Y | Y | Y |
| Provide short breaks | Y | Y | Y | Y | Y | Y | Y |
| Attendance plan | Y | Y | Y | Y | Y | Y | Y |
| Communication with parents | Y | Y | Y | Y | Y | Y | Y |
| Assign "jobs" to reduce symptoms | Y | Y | Y | Y | Y | Y | Y |
| Counseling check-ins | Y | Y | Y | Y | Y | Y | Y |
| Praise whenever possible | Y | Y | Y | Y | Y | Y | Y |
|  | Y | Y | Y | Y | Y | Y | Y |
| ATTENTION/FOCUS |  |  |  |  |  |  |  |
| Seat student near front of room | Y | Y | Y | Y | Y | Y | Y |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Monitor on-task performance | Y | Y | Y | Y | Y | Y | Y |
| Arrange private signal to cue student to off-task behavior | Y | Y | Y | Y | Y | Y | Y |
| Establish and maintain eye contact when giving oral directions | Y | Y | Y | Y | Y | Y | Y |
| Stand in proximity to student to focus attention | Y | Y | Y | Y | Y | Y | Y |
| Provide short breaks when refocusing is needed | Y | Y | Y | Y | Y | Y | Y |
| Use study carrel | Y | Y | Y | Y | Y | Y | Y |
| Arrange physical layout to limit distractions | Y | Y | Y | Y | Y | Y | Y |
| Frequently ask questions to engage student | Y | Y | Y | Y | Y | Y | Y |
| Refocusing and redirection | Y | Y | Y | Y | Y | Y | Y |
| Behavior/time management system | Y | Y | Y | Y | Y | Y | Y |
| Group directions 1 step at a time | Y | Y | Y | Y | Y | Y | Y |
| Assign "jobs" to reduce symptoms | Y | Y | Y | Y | Y | Y | Y |


| STUDE | ELA | MATH | SCI | SS | WRLD LANG |  <br> PE | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manual) | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Arrange physical layout to limit distractions | Y | Y | Y | Y | Y | Y | Y |
| Frequently ask questions to engage student | Y | Y | Y | Y | Y | Y | Y |
| Educate/train relevant staff with regards to the signs/symptoms, promote tolerance of needs, and/or providing assistance | Y | Y | Y | Y | Y | Y | Y |
| Extended time on assignments/assessments | Y | Y | Y | Y | Y | Y | Y |
| Provide assessments in a small group setting | Y | Y | Y | Y | Y | Y | Y |
| Provide buddy system | Y | Y | Y | Y | Y | Y | Y |
| Establish and maintain eye contact when giving oral directions | Y | Y | Y | Y | Y | Y | Y |
| Permit the use of headphones while working | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | WRLD LANG | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GIFTED AND TALENTED STUDENTS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| CURRICULUM |  |  |  |  |  |  |  |
| Acceleration | Y | Y | Y | Y | Y | Y | Y |
| Compacting | Y | Y | Y | Y | Y | Y | Y |
| INSTRUCTION |  |  |  |  |  |  |  |
| Grouping | Y | Y | Y | Y | Y | Y | Y |
| Independent Study | Y | Y | Y | Y | Y | Y | Y |
| Differentiated Conferencing | Y | Y | Y | Y | Y | Y | Y |
| Project-Based Learning | Y | Y | Y | Y | Y | Y | Y |
| Competitions | Y | Y | Y | Y | Y | Y | Y |
| Differentiated Instruction | Y | Y | Y | Y | Y | Y | Y |


| Summer Work | Y | Y | Y | Y | Y | Y | Y |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parent Communication | Y | Y | Y | Y | Y | Y | Y |
|  | ELA | MATH | SCI | SS | WRLD LANG | HLTH \& PE | VIS \& PERF ARTS |
| STUDENTS WITH 504 PLANS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| ACADEMICS |  |  |  |  |  |  |  |
| Provide necessary services (Lit Support, Math Support, OT, PT, speech, etc.) | Y | Y | Y | Y | Y | Y | Y |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Provide structure and positive reinforcements | Y | Y | Y | Y | Y | Y | Y |
| Frequently check for understanding | Y | Y | Y | Y | Y | Y | Y |
| Graphic organizers | Y | Y | Y | Y | Y | Y | Y |
| Tracker | Y | Y | Y | Y | Y | Y | Y |
| Slant board | Y | Y | Y | Y | Y | Y | Y |
| Access to accurate notes | Y | Y | Y | Y | Y | Y | Y |
| Provide enlarged copies of notes/textbooks | Y | Y | Y | Y | Y | Y | Y |
| Access to notes ahead of time | Y | Y | Y | Y | Y | Y | Y |
| Provide a print out of weekly assignments | Y | Y | Y | Y | Y | Y | Y |
| Additional time to complete tasks/long-term projects with adjusted due dates | Y | Y | Y | Y | Y | Y | Y |
| Limit number of items student is expected to learn at one time | Y | Y | Y | Y | Y | Y | Y |
| Break down tasks into manageable units | Y | Y | Y | Y | Y | Y | Y |
| Directions repeated, clarified, or reworded | Y | Y | Y | Y | Y | Y | Y |
| Frequent breaks during class | Y | Y | Y | Y | Y | Y | Y |
| Provide books on tape, CD, read aloud computer software, or electronic text | Y | Y | Y | Y | Y | Y | Y |
| Provide opportunities for using a Chromebook as well as assistive technologies | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | WRLD LANG | $\begin{gathered} \text { HLTH \& } \\ \text { PE } \end{gathered}$ | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STUDENTS WITH 504 PLANS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Use of closed captioned videos/film/television | Y | Y | Y | Y | Y | Y | Y |
| Provide buddy system | Y | Y | Y | Y | Y | Y | Y |
| Modify schedule | Y | Y | Y | Y | Y | Y | Y |
| Modify deadlines | Y | Y | Y | Y | Y | Y | Y |
| Adjust activity, length of assignment, and/or number of problems, including homework | Y | Y | Y | Y | Y | Y | Y |
| Modification in grading system | Y | Y | Y | Y | Y | Y | Y |
| Educate/train relevant staff with regards to the signs/symptoms, promote tolerance of needs, and/or providing assistance | Y | Y | Y | Y | Y | Y | Y |
| Communication with parents | Y | Y | Y | Y | Y | Y | Y |
| Recommended use of Tutorial Center/Extra help from teachers | Y | Y | Y | Y | Y | Y | Y |
| Allow verbal rather than written responses | Y | Y | Y | Y | Y | Y | Y |
| Modify curriculum content based on student's ability level | Y | Y | Y | Y | Y | Y | Y |
| Reduce readability level of materials | Y | Y | Y | Y | Y | Y | Y |
| Allow typed rather than handwritten responses | Y | Y | Y | Y | Y | Y | Y |
| Use of calculator | N/A | Y | Y | Y | Y | Y | N/A |
| Use of a math grid | N/A | Y | Y | Y | Y | Y | N/A |
|  |  |  |  |  |  |  |  |
| ASSESSMENTS |  |  |  |  |  |  |  |
| Utilize dictionary on assessments | Y | Y | Y | Y | Y | Y | Y |
| Use paper-based assessments or assignments | Y | Y | Y | Y | Y | Y | Y |
| Provide assessments in a small group setting | Y | Y | Y | Y | Y | Y | Y |
| Provide oral assessments | Y | $Y$ | Y | Y | $Y$ | Y | Y |
| Permission to elaborate orally on written assessments | Y | Y | Y | Y | Y | Y | Y |
| Permit use of scrap paper on assessments | Y | Y | Y | Y | Y | Y | Y |


|  | ELA | MATH | SCI | SS | WRLD LANG | HLTH \& PE | VIS \& PERF ARTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STUDENTS WITH 504 PLANS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Permit to write directly on assessments in lieu of using Scantron forms | Y | Y | Y | Y | Y | Y | Y |
| Option to retake assessments | Y | Y | Y | Y | Y | Y | Y |
| Provide a study guide | Y | Y | Y | Y | Y | Y | Y |
| Modify spatial layout of assessments | Y | Y | Y | Y | Y | Y | Y |
| SOCIAL/EMOTIONAL |  |  |  |  |  |  |  |
| Children's books addressing presenting problem | Y | Y | Y | Y | Y | Y | Y |
| Student jots down presenting problem and erase when it goes away | Y | Y | Y | Y | Y | Y | Y |
| Meet with guidance counselor | Y | Y | Y | Y | Y | Y | Y |
| Student jots down presenting problem and erase when it goes away | Y | Y | Y | Y | Y | Y | Y |
| Attendance plan | Y | Y | Y | Y | Y | Y | Y |
| Utilize nurse/Health Office/counselor/SAC during episodes of presenting problem | Y | Y | Y | Y | Y | Y | Y |
| Provide short breaks | Y | Y | Y | Y | Y | Y | Y |
| Attendance plan | Y | Y | Y | Y | Y | Y | Y |
| Communication with parents | Y | Y | Y | Y | Y | Y | Y |
| Assign "jobs" to reduce symptoms | Y | Y | Y | Y | Y | Y | Y |
| Behavior management system | Y | Y | Y | Y | Y | Y | Y |
| ATTENTION/FOCUS |  |  |  |  |  |  |  |
| Seat student near front of room | Y | Y | Y | Y | Y | Y | Y |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Monitor on-task performance | Y | Y | Y | Y | Y | Y | Y |
| Arrange private signal to cue student to off-task behavior | Y | Y | Y | Y | Y | Y | Y |


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| STUDENTS WITH 504 PLANS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Establish and maintain eye contact when giving oral directions | Y | Y | Y | Y | Y | Y | Y |
| Stand in proximity to student to focus attention | Y | Y | Y | Y | Y | Y | Y |
| Provide short breaks when refocusing is needed | Y | Y | Y | Y | Y | Y | Y |
| Use study carrel | Y | Y | Y | Y | Y | Y | Y |
| Arrange physical layout to limit distractions | Y | Y | Y | Y | Y | Y | Y |
| Frequently ask questions to engage student | $Y$ | Y | Y | Y | Y | Y | Y |
| Refocusing and redirection | Y | Y | Y | Y | Y | Y | Y |
| Behavior/time management system | Y | Y | Y | Y | Y | Y | Y |
| Group directions 1 step at a time | Y | Y | Y | Y | Y | Y | Y |
| Assign "jobs" to reduce symptoms | Y | Y | Y | Y | Y | Y | Y |
| Arrange physical layout to limit distractions | Y | Y | Y | Y | Y | Y | Y |
| Frequently ask questions to engage student | Y | Y | Y | Y | Y | Y | Y |
| Educate/train relevant staff with regards to the signs/symptoms, promote tolerance of needs, and/or providing assistance | Y | Y | Y | Y | Y | Y | Y |
| Extended time on assignments/assessments | Y | Y | Y | Y | Y | Y | Y |
| Provide assessments in a small group setting | Y | Y | Y | Y | Y | Y | Y |
| Provide buddy system | Y | Y | Y | Y | Y | Y | Y |
| Establish and maintain eye contact when giving oral directions | Y | Y | Y | Y | Y | Y | Y |
| PHYSICAL |  |  |  |  |  |  |  |
| Preferential seating | Y | Y | Y | Y | Y | Y | Y |
| Arrange physical layout | Y | Y | Y | Y | Y | Y | Y |
| Educate/train relevant personnel with regards to the signs/symptoms, promote tolerance of needs, and/or providing assistance | Y | Y | Y | Y | Y | Y | Y |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STUDENTS WITH 504 PLANS | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| Utilize nurse during episodes of presenting problem | Y | Y | Y | Y | Y | Y | Y |
| Attendance plan | Y | Y | Y | Y | Y | Y | Y |
| Communication with parents | Y | Y | Y | Y | Y | Y | Y |
| Use of alternative settings | Y | Y | Y | Y | Y | Y | Y |
| Excessive physical activities kept to a minimum | Y | Y | Y | Y | Y | Y | Y |
| Excused from activities that affect presenting issue | Y | Y | Y | Y | Y | Y | Y |
| Include in emergency plans of presenting issue | Y | Y | Y | Y | Y | Y | Y |
| Allow use of assistive devices | Y | Y | Y | Y | Y | Y | Y |
| Monitor presenting issue | Y | Y | Y | Y | Y | Y | Y |


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CAREER EDUCATION | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 | K-6 |
| CRP1. Act as a responsible and contributing citizen and employee. | Y | Y | Y | Y | Y | Y | Y |
| CRP2. Apply appropriate academic and technical skills. | $Y$ | Y | Y | Y | Y | Y | Y |
| CRP3. Attend to personal health and financial well-being. | Y | Y | Y | Y | Y | Y | Y |
| CRP4. Communicate clearly and effectively and with reason. | Y | Y | Y | Y | Y | Y | Y |
| CRP5. Consider the environmental, social and economic impacts of decisions. | Y | Y | Y | Y | Y | Y | Y |
| CRP6. Demonstrate creativity and innovation. | Y | Y | Y | Y | Y | Y | Y |
| CRP7. Employ valid and reliable research strategies. | Y | Y | Y | Y | Y | Y | Y |
| CRP8. Utilize critical thinking to make sense of problems and persevere in solving them. | Y | Y | Y | Y | Y | Y | Y |


| CRP9. Model integrity, ethical leadership and effective management. | Y | Y | Y | Y | Y | Y | Y |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRP10. Plan education and career paths aligned to personal goals. | Y | Y | Y | Y | Y | Y | Y |
| CRP11. Use technology to enhance productivity. | Y | Y | Y | Y | Y | Y | Y |
| CRP12. Work productively in teams while using cultural global competence. | Y | Y | Y | Y | Y | Y | Y |

