Board Approved October 2021

Wilson Area School District
Planned Course Guide

Title of planned course: Mathematics Grade 5

Subject Area: Math

Grade Level: 5th

Course Description: This course is designed to extend a student's knowledge within the areas of numbers and operations, fractions, algebraic thinking, geometry, measurement, and data and probability. Students will develop mathematical reasoning and problem solving skills by means of standards-aligned lessons and assessments, real world applications and through the integration of technology.

Time/Credit for this Course: One Full Academic Year

Curriculum Writing Committee: Nicole Housel and Stefanie Sneeringer

Curriculum Map

August: Numbers and Operations

- Review of Whole Number Operations
- Reading and Writing Whole Numbers

September: Numbers and Operations

- Place Value of Whole Numbers
- Ordering Whole Numbers
- Rounding Whole Numbers
- Powers of 10 (exponents)
- Place Value of Decimals
- Comparing Decimals
- Rounding Decimals
- Problem Solving with Place Value
- Adding and Subtracting Decimals

October: Numbers and Operations

- Multiply with Powers of 10 (Exponents)
- Multiplying by two and three digit whole numbers
- Multiply with Zeros
- Problem Solving with Whole Number Operations
- Multiply Decimals with Powers of 10
- Multiplying Decimals (Not to exceed hundredths place value)
- Multiplication Properties

November: Numbers and Operations

- Dividing by a Single Digit Whole Number
- Dividing by a Two Digit Whole Number
- Dividing Decimals to Hundredths Place Value(no decimal divisors)
- Strategies to Divide
- Factors and Multiples
- Fractions and Mixed Numbers

December: Numbers and Operations

- Problem Solving with Adding and Subtracting Fractions
- Multiplying Fractions and Mixed Numbers
- Spiral Review of Skills

January: Represent and Interpret Data/ Geometric Measurement

- Dividing Fractions
- Line Plots (Analyze and Make)
- Problem Solving with Line Plots
- Perimeter and Area
- Volume
- Combined Volume
- Problem Solving with Volume

February: Measurement

- Choosing the Appropriate Unit

- Converting Measurements
- Converting Units of Time
- Problem Solving with Measurement
- Order of Operations

March : Numbers and Operations/ Geometry

- Coordinate Graphing
- Finding Rules for Number Patterns
- Extending Number Patterns
- Interpreting and Solving Equations
- Two-Dimensional Figures

April: Numbers and Operations

- Review of Common Core Skills
- Problem Solving (mixed)
- Multi-step Problem Solving

May: Measurement/Geometry

- Rulers
- Graph Creation and Analyzing

June:

Data Analysis and Probability/Geometry

- Probability
- Predicting Outcomes
- Ratios and Rates
- Integers

Wilson Area School District
Planned Course Materials

Course Title: Mathematics Grade 5

Textbook:

- *envisionMATH*
  Savvas Learning Company, Inc.
  2020
  https://www.savvas.com/

Supplemental Books:

- *envisionMATH*
  Pearson Education, Inc.
  2012
  http://pearsonschool.com

- PSSA Coach Mathematics
  2020

Teacher Resources:

- *envisionMATH*
  Savvas Learning Company, Inc.
  2020
  https://www.savvasrealize.com/

- *Houghton Mifflin Mathematics*
  Houghton Mifflin
  2002
  http://www.eduplace.com/math/mw/practice/lp_5.html

- PSSA Coach Mathematics
  2020

- *Discovery Education*
  http://streaming.discoveryeducation.com/

- Study Island
  app.studyisland.com

Curriculum Scope & Sequence

Planned Course: Mathematics Grade 5

Unit: Numbers and Operations: Place Value (Topic 1)
- Place Value
- Reading and Writing Whole Numbers
- Ordering Whole Numbers
- Rounding Whole Numbers

Time frame: Two Weeks

State Standards: 2.1.5.B.1

Anchor(s) or adopted anchor: M05.A-T.1.1, M05.A-T.1.2, M05.A-T.1.3, M05.A-T.1.4, M05.A-T.1.5

Essential content/objectives: At end of the unit, students will be able to:
- Read and write whole numbers in standard, word, and expanded form to the hundred billions place value
- Compare, order, and round whole numbers to the hundred billions place value

Core Activities: Students will complete/participate in the following:
- Spiral Review
- Create a place value chart
- Describe and differentiate word form, standard form and expanded form
- Discuss and apply rules for rounding whole numbers

Extensions:
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Performance Task

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Numbers and Operations: Decimals (Topic 1 and 2)
- Place Value of Decimals
- Comparing Decimals
- Rounding Decimals
- Estimating to Solve Problems
- Adding and Subtracting Decimals

Time frame: Two Weeks

State Standards: 2.1.5.B.2

Anchor(s) or adopted anchor: M05.A-T.2.1. 1, M05.A-T.2.1.3

Essential content/objectives: At end of the unit, students will be able to:
- Read and write decimals in standard, word, and expanded form to the thousandths place value
- Compare, order, and round decimals to the thousandths place value
- Use estimation to solve problems and check for reasonableness
- Add and subtract decimal numbers

Core Activities: Students will complete/participate in the following:
- Spiral Review
- Create a place value chart
- Describe and differentiate word form, standard form and expanded form
- Discuss and apply rules for rounding decimals
- Compare and contrast adding and subtracting whole numbers and decimals (lining up decimal place values)

Extensions:
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:

- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators
- Newspapers

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Plan and execute a grocery list comparing estimated cost to actual cost

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Numbers and Operations: Multiplication (Topic 3&4)
- Exponents
- Multiplication

Time frame: 4 – 5 weeks

State Standards: 2.1.5.B.2

Anchor(s) or adopted anchor: M05.A-T.1.1.2, M05.A-T.2.1.1, M05.A-T.2.1.3

Essential content/objectives: At end of the unit, students will be able to:
- Express the value of exponents to the power of ten
- Identify and define the associative, identity, and zero properties of multiplication
- Multiply by two and three digit whole numbers
- Multiply decimals not to exceed the hundredths place value
- Use estimation to solve multiplication problems using whole numbers and decimals

Core Activities: Students will complete/participate in the following:
- Use mental math exercises to check for reasonableness
- Use calculators to identify patterns relating to the powers of ten
- Discuss the movement of decimal place values in multiplication
- Create multiplication problems using playing cards and dice

Extensions:
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Building on previous shopping list, students will calculate new cost when order is doubled, tripled, etc.

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Numbers and Operations: Division (Topic 5 & 6)
- Division of Whole Numbers and Decimals

Time frame: 2 Weeks

State Standards: 2.1.5.B.2

Anchor(s) or adopted anchor: M05.A-T.2.1.1, M05.A-T.2.1.2, M05.A-T.2.1.3

Essential content/objectives: At end of the unit, students will be able to:
- Dividing by a Single Digit Whole Number
- Dividing by a Two Digit Whole Number
- Dividing Decimals to Hundredths Place Value (no decimal divisors)

Core Activities: Students will complete/participate in the following:
- Spiral review
- Use manipulatives to model division process
- Use estimation to generate a reasonable quotient with a two digit divisor
- Create a division problem using cards and dice

Extensions:
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”
- Using divisibility rules for 2, 3, 4, 5, 9, 10

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Calculators

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Building on previous shopping list students will calculate the cost of one item out of six (Ex.- six pack of paper towel cost 4.29- What is the cost per roll?)

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Numbers and Operations: Fractions (Topic 7)
- Factors and Multiples
- Add and Subtract Fractions

Time frame: 4 – 5 weeks

State Standards: 2.1.5.C.1

Anchor(s) or adopted anchor: M05.A-F.1.1.1

Essential content/objectives: At end of the unit, students will be able to:
- Find the Greatest Common Factors of two numbers
- Use the GCF to simplify fractions
- Find the Least Common Multiple of two numbers and/or use the LCM to find the common denominator of two fractions
- Add and subtract fractions (including mixed numbers) with like and unlike denominators within the context of word problems, as well as straight computation

Core Activities: Students will complete/participate in the following:
- Spiral review
- Create factor trees
- Use a number line to identify multiples of a given number
- Create fraction strips
- Use fraction strips and fraction circle to model addition and subtraction of fractions and mixed numbers

Extensions:
- Integration of Technology
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”
- Ordering whole numbers, mixed numbers, fractions and decimals

Remediation:
- Integration of manipulatives
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching
- Use of 100’s chart to identify factors

Instructional Methods:

- Incorporation of manipulatives within cooperative learning groups
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators
- Manipulatives such as fractions strips and fraction circles.

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Performance Task

Curriculum Scope & Sequence

Planned Course: Mathematics Grade 5

Unit: Operations and Algebraic Thinking: Fractions (Topics 8 & 9)
- Multiplying and Dividing Fractions

Time frame: 4 – 5 weeks

State Standards: 2.1.5.C.2, 2.2.5.A.1, 2.2.5.A.4

Anchor(s) or adopted anchor: M05-A-F.2.1.1, M05-A-F.2.1.2, M05-A-F.2.1.3, M05-A-F.2.1.4, M05.B-0.1.1.1, M05.B-0.1.1.2, M05.B-0.2.1.1, M05.B-0.2.1.2

Essential content/objectives: At end of the unit, students will be able to:
- Multiply a fraction (including mixed numbers) by a fraction within the context of word problems, as well as straight computation
- Interpret multiplication as a resizing process
- Divide unit fractions by a whole number and a whole number by a unit fraction

Core Activities: Students will complete/participate in the following:
- Spiral review
- Use a picture (hundredths grid) to model multiplication and division of fractions
- Create a recipe (2/3 cup, ½ tsp etc) and then double, triple, etc the created recipe

Extensions:
- Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Measurement and Data: Graphs (Topic 10 & 14)
- Line Plots
- Graphs
- Coordinate Grids

Time frame: 2 Weeks

State Standards: 2.4.5.A.2, 2.3.5.A.1

Anchor(s) or adopted anchor: M05.D-M.2.1.2, M05.C-G.1.1.1, M05.C-G.1.1.2

Essential content/objectives: At end of the unit, students will be able to:
- Line Plots with Fractions
- Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs and line graphs.
- Use a title, appropriate scale and proper labels
- Identify parts of the coordinate plane (x and y axis)
- Identify ordered pairs
- Plot ordered pairs

Core Activities: Students will complete/participate in the following:
- Spiral review
- Create a bar graph using information gathered in a class survey
- Discuss the need for titles, appropriate scales and correct labels
- Create an image by plotting ordered pairs on graph paper

Extensions:
- Integration of Technology
  - Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”
  - http://www.scweb4free.com/linegr1.html
  - http://www.ixl.com/math/grade-5/create-bar-graphs
  - http://www.ixl.com/math/grade-5/interpret-line-plots
    (For additional graphing websites go to faculty drive)

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:

- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Students create an image by correctly plotting various coordinates
    Conduct a survey and create various graphs using the data

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Geometry and Measurement (Topic 11 & 16)

Time frame: 4 – 5 weeks

State Standards: 2.3.5.A.2, 2.4.5.A.5 2.1.4.C.1, 2.3.6.A.1, 2.3.8.A.2

Anchor(s) or adopted anchor: M04.A-F.1.1.1, M04.A-F.1.1.2, M06.C-G.1.1.1, M06.C-G.1.1.2, M06.C-G.1.1.3, M08.C-G.1.1.1, M08.C-G.1.1.2, M08.C-G.1.1.3, M08.C-G.1.1.4 M05.C-G.2.1.1, M05.D-M.3.1.1, M05.D-M.3.1.2

Essential content/objectives: At end of the unit, students will be able to:

- Use, describe, and develop procedures to solve problems involving volume
- Apply the formula V= l x w x h and V = B x h to a variety of three dimensional shapes
- Identify perimeter as the distance around a figure
- Calculate the perimeter of a given figure P= l + w
- Identify the area as the amount of surface it covers
- Calculate the area of a given figure A = l x w
- Identify basic properties of two and three dimensional figures
- Use basic properties to classify two and three dimensional figures

Core Activities: Students will complete/participate in the following:

- Spiral review
- Use geoboards to create various geometric figures
- Compare and contrast various geometric figures
- Use base ten blocks to model the concept of volume

Extensions:

- Integration of Technology
- Analyze architecture to identify geometric figures
- Geometry picture walk- students will work in cooperative groups to create Technology and Activity Centers
- Real world applications-
    - enVision Stem Project
- “Pick a Project”a picture book using photographs of geometric figures found within the neighborhood
- Calculating volume of various containers

Remediation:

- Integration of manipulatives
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:

- Incorporation of manipulatives
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Teacher created worksheets
- Practice books and masters
- Geometric solids
- Geoboards
- Base ten blocks

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Measurement (Topic 12)

Time frame: 1- 2 weeks

State Standards: 2.5.A.1

Anchor(s) or adopted anchor: M05.D-M.1.1.1

Essential content/objectives: At end of the unit, students will be able to:
- Solve problems using conversions within a given measurement system
- Use conversions to solve multi step real world problems

Core Activities: Students will complete/participate in the following:
- Spiral review
- Create a chart to show metric conversions (ex-decimeters to meters)
- Create a rhyme or a song to memorize the rules of converting units

Extensions:
- Integration of Technology
  - Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”
- Destination- Convert distance traveled in miles to various units of length (miles, yards, feet, inches, etc.)

Remediation:
- Integration of manipulatives
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching
- http://www.eduplace.com/kids/hmm/practice/quiz.html?qzid=hmm07_ep/gr4/1204&qseq=4,2,1,11,0,5,7,10,3,9&at=0&curq=0&score=0&UNIT=5

Instructional Methods:
- Incorporation of manipulatives
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Performance Task

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Operations and Algebraic Thinking: Order of Operations (Topics 13 & 15)
- Write and Interpret Numerical Expressions
- Analyze Patterns and Relationships

Time frame: 4 – 5 weeks

State Standards: 2.1.5.C.2, 2.2.5.A.1, 2.2.5.A.4

Anchor(s) or adopted anchor: M05-A-F.2.1.1, M05-A-F.2.1.2, M05-A-F.2.1.3, M05-A-F.2.1.4, M05.B-0.1.1.1, M05.B-0.1.1.2, M05.B-0.2.1.1, M05.B-0.2.1.2

Essential content/objectives: At end of the unit, students will be able to:
- Multiply a fraction (including mixed numbers) by a fraction within the context of word problems, as well as straight computation
- Interpret multiplication as a resizing process
- Divide unit fractions by a whole number and a whole number by a unit fraction
- Create, extend and analyze patterns
- Analyze and complete calculations by applying the order of operations

Core Activities: Students will complete/participate in the following:
- Spiral review
- Use a picture (hundredths grid) to model multiplication and division of fractions
- Create a recipe (2/3 cup, ½ tsp etc) and then double, triple, etc the created recipe
- Create and analyze function tables
- Create a pattern using symbols or numbers
- Describe the rule of the pattern
- Use an acronym to determine order of operations (P.E.M.D.A.S)
- Perform calculations using correct order of operations

Extensions:
- Integration of Technology
  - Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

- Destination- Convert distance traveled in miles to various units of length (miles, yards, feet, inches, etc.)

Remediation:

- Integration of manipulatives
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching
- http://www.eduplace.com/kids/hmm/practice/quiz.html?qzid=hmm07_ep/gr4/1204&qseq=4,2,1,11,0,5,7,10,3,9&at=0&curq=0&score=0&UNIT=5

Instructional Methods:

- Incorporation of manipulatives
- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment
  - Performance Task

Curriculum Scope & Sequence

Planned Course: Mathematics- Grade 5

Unit: Data Analysis and Probability
- Probability
- Predicting Outcomes
- Ratios and Rates
- Integers

Time frame: 2 weeks

State Standards: 2.1.6.D.1

Anchor(s) or adopted anchor: M06.A-R.1.1.1, M06.A-R.1.1.2, M06.A-R.1.1.3, M06.A-R.1.1.4, M06.A-R.1.1.5

Essential content/objectives: At end of the unit, students will be able to:
- Determine the outcome of a given event
- Determine/Show possible combinations
- Use of rates and ratios

Core Activities: Students will complete/participate in the following:
- Spiral review
- Probability Roll- Rolling dice to determine the probability of acquiring an even number, odd numbers, rolling various factors, etc.
- Create a chart to show that ratios can be written in three different ways
- Calculate the unit rate of grocery items in a store ad (ex. Six pack of soda-determine price of each can)
- Add and subtract integers

Extensions:
- Integration of Technology
  - Technology and Activity Centers
- Real world applications-
  - enVision Stem Project
  - “Pick a Project”

Remediation:
- Differentiated assignments and assessments
- Leveled Centers
- Additional small group instruction
- Reteaching

Instructional Methods:

- Small and large group direct instruction
- Direct Instruction/Modeling
- Guided Practice
- Differentiated Instruction
- Independent Practice
- Small and large group discussion

Materials & Resources:

- *envisionMATH*
  Savvas Learning Company, Inc., 2020
  https://www.savvas.com/
- PSSA Coach Mathematics, 2020
- *Discovery Education:* http://streaming.discoveryeducation.com/
- Teacher created worksheets
- Practice books and masters
- Study Island: app.studyisland.com
- Calculators
- Spinners
- Dice

Assessments:

- Diagnostic
  - Pretest
  - Questioning
  - Small and large group discussion
  - Student observation
  - Teacher created checklist
- Formative
  - Observation of student work
  - Quizzes
  - Practice worksheets
- Summative
  - End-of-Unit assessment