M/J Grade 7 Mathematics
Course Code: 120504001

2023-2024
Year at a Glance

Please use the code below to join the Schoology Collaborative Group for this course.
(Do not share code with students)

9QSN-6PX5-KF4CH
Middle Grades Math – Grades 6-8 Core/Regular Collaborative Group

MIAMI-DADE COUNTY PUBLIC SCHOOLS
District Pacing Guide
YEAR-AT-A-GLANCE

M/J Grade 7 Mathematics	2023-2024	Course Code: 120504001

Florida's B.E.S.T. Standards Mathematics

First Nine Weeks
49 Days
August 17, 2023 – October 26, 2023

Topic 1: Use Rational Number Operations 08/17 – 09/18 (22 Traditional: 11 Block)		Topic 2: Analyze and Use Proportional Relationships 09/19 – 10/13 (18 Traditional: 9 Block)	
Lessons	*Benchmarks*	*Lessons*	*Benchmarks*
• 1-1: Write Rational Numbers in Equivalent Forms • 1-2: Add and Subtract Rational Numbers • 1-3: Multiply Rational Numbers • 1-4: Divide Rational Numbers • 1-5: Evaluate Expressions with Exponents • 1-6: Apply Laws of Exponents • 1-7: Solve Problems with Rational Numbers	• MA.7.NSO.1.1 • MA.7.NSO.1.2 • MA.7.NSO.2.1 • MA.7.NSO.2.2 • MA.7.NSO.2.3	• 2-1: Understand Proportional Relationships: Equivalent Ratios • 2-2: Describe Proportional Relationships: Constant of Proportionality • 2-3: Graph Proportional Relationships • 2-4: Use Proportional Relationships: Relate Customary and Metric Units • 2-5: Apply Proportional Reasoning to Solve Problems	• MA.7.AR.3.2 • MA.7.AR.3.3 • MA.7.AR.4.1 • MA.7.AR.4.2 • MA.7.AR.4.3 • MA.7.AR.4.4 • MA.7.AR.4.5

Topic 3: Analyze and Solve Percent Problems (Continued into next quarter) 10/16 – 11/14 (20 Traditional: 10 Block)	
Lessons	*Benchmarks*
1st 9-Weeks Content • 3-1: Analyze Percents of Numbers • 3-2: Connect Percent and Proportion • 3-3: Represent and Use the Percent Equation **2nd 9-Weeks Content** • 3-4: Solve Percent Change and Percent Error Problems • 3-5: Solve Markup and Markdown Problems • 3-6: Solve Simple Interest Problems	• MA.7.NSO.1.2 • MA.7.AR.3.1 • MA.7.AR.3.2 • MA.7.AR.4.5

MIAMI-DADE COUNTY PUBLIC SCHOOLS
District Pacing Guide
YEAR-AT-A-GLANCE

M/J Grade 7 Mathematics	2023-2024	Course Code: 120504001

Florida's B.E.S.T. Standards Mathematics

Second Nine Weeks
41 Days
October 30, 2023 – January 18, 2024

Topic 3: Analyze and Solve Percent Problems (Continued from prior quarter) 10/16 – 11/14 (20 Traditional: 10 Block)		Topic 4: Write Algebraic Expressions in Equivalent Forms 11/15 – 12/15 (18 Traditional: 9 Block)	
Lessons	*Benchmarks*	*Lessons*	*Benchmarks*
1st 9-Weeks Content • 3-1: Analyze Percents of Numbers • 3-2: Connect Percent and Proportion **2nd 9-Weeks Content** • 3-3: Represent and Use the Percent Equation • 3-4: Solve Percent Change and Percent Error Problems • 3-5: Solve Markup and Markdown Problems • 3-6: Solve Simple Interest Problems	• MA.7.NSO.1.2 • MA.7.AR.3.1 • MA.7.AR.3.2 • MA.7.AR.4.5	• 4-1: Write and Evaluate Algebraic Expressions • 4-2: Generate Equivalent Expressions • 4-3: Simplify Expressions • 4-4: Expand Expressions • 4-5: Write Equivalent Expressions • 4-6: Add Expressions • 4-7: Subtract Expressions • 4-8: Analyze Equivalent Expressions	• MA.7.AR.1.1 • MA.7.AR.1.2

Topic 5: Solve Problems Using Equations and Inequalities (Continued into next quarter) 12/18 – 01/29 (18 Traditional: 9 Block)	
Lessons	*Benchmarks*
2nd 9-Weeks Content • 5-1: Write Two-Step Equations • 5-2: Solve Two-Step Equations • 5-3: Solve Inequalities Using Addition or Subtraction • 5-4: Solve Inequalities Using Multiplication or Division **3rd 9-Weeks Content** • 5-4: Solve Inequalities Using Multiplication or Division	• MA.7.AR.2.1 • MA.7.AR.2.2

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Third Nine Weeks
50 Days
January 22, 2024 – April 9, 2024

Topic 5: Solve Problems Using Equations and Inequalities (Continued from prior quarter) 12/18 – 01/29 (18 Traditional: 9 Block)		Topic 6: Represent and Interpret Data 01/30 – 02/16 (14 Traditional: 7 Block)	
Lessons	*Benchmarks*	*Lessons*	*Benchmarks*
2nd 9-Weeks Content • 5-1: Write Two-Step Equations • 5-2: Solve Two-Step Equations • 5-3: Solve Inequalities Using Addition or Subtraction • 5-4: Solve Inequalities Using Multiplication or Division **3rd 9-Weeks Content** • 5-4: Solve Inequalities Using Multiplication or Division	• MA.7.AR.2.1 • MA.7.AR.2.2	• 6-1: Make and Interpret Circle Graphs • 6-2: Use Proportions to Make Predictions from Data • 6-3: Determine an Appropriate Measure of Center and Variability • 6-4: Interpret Measures of Center and Variability • 6-5: Draw Conclusions from Data • 6-6: Choose an Appropriate Graphical Representation for Data	• MA.7.DP.1.1 • MA.7.DP.1.2 • MA.7.DP.1.3 • MA.7.DP.1.4 • MA.7.DP.1.5
Topic 7: Understand Probability 02/20 – 03/06 (12 Traditional: 6 Block)		Topic 8: Solve Problems Involving Geometry 03/07 – 04/09 (18 Traditional: 9 Block)	
Lessons	*Benchmarks*	*Lessons*	*Benchmarks*
• 7-1: Understand Likelihood and Probability • 7-2: Understand Theoretical Probability • 7-3: Understand Experimental Probability • 7-4: Compare Theoretical and Experimental Probabilities	• MA.7.DP.2.1 • MA.7.DP.2.2 • MA.7.DP.2.3 • MA.7.DP.2.4	**3rd 9-Weeks Content** • 8-1: Derive and Apply Area Formulas for Quadrilaterals • 8-2: Area of Composite Figures • 8-3: Solve Problems Involving Circumference of a Circle • 8-4: Solve Problems Involving Area of a Circle • 8-5: Solve Problems Involving Scale Drawings • 8-6: Find Surface Area of Cylinders 8-7: Find Volume of Cylinders	• MA.7.GR.1.1 • MA.7.GR.1.2 • MA.7.GR.1.3 • MA.7.GR.1.4 • MA.7.GR.1.5 • MA.7.GR.2.1 • MA.7.GR.2.2 • MA.7.GR.2.3

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Florida's B.E.S.T. Standards Mathematics

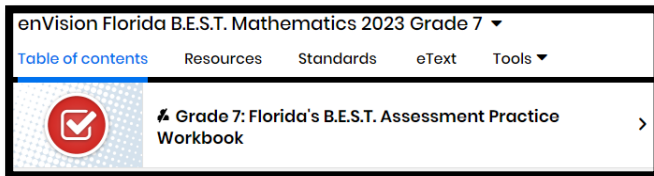**Fourth Nine Weeks**
40 Days
April 11, 2024 – June 6, 2024

Topic 9 – F.A.S.T. Spiral Review
04/11 – 04/30 (14 Traditional: 7 Block)
F.A.S.T. PM3 Administration Window 05/01 – 05/31

Lessons	Standards
Grade 7: Florida's B.E.S.T. Assessment Practice Workbook (Accessible Online via Savvas Realize) enVision Florida B.E.S.T. Mathematics 2023 Grade 7 Table of contents Resources Standards eText Tools ☑ Grade 7: Florida's B.E.S.T. Assessment Practice Workbook *Additional details are available in the Topic 9 Pacing Guide*	• MA.7.NSO.1 • MA.7.NSO.2 • MA.7.AR.1 • MA.7.AR.2 • MA.7.AR.3 • MA.7.AR.4 • MA.7.GR.1 • MA.7.GR.2 • MA.7.DP.1 • MA.7.DP.2

Topic 10: Strengthen Grade Level Skills Through Problem Based Learning
05/01 – 06/06 (26 Traditional: 13 Block)
F.A.S.T. PM3 Administration Window 05/01 – 05/31

Lessons & Benchmarks

Lessons	Benchmarks	Lessons	Benchmarks
• Topic 1: 3-Act Mathematical Modeling • Topic 1: Pick a Project 1A or 1B • Topic 2: 3-Act Mathematical Modeling • Topic 2: Pick a Project 2A or 2B • Topic 3: 3-Act Mathematical Modeling • Topic 3: Pick a Project 3A or 3B • Topic 4: 3-Act Mathematical Modeling • Topic 4: Pick a Project 4A or 4B	MA.7.NSO.2.1 MA.7.NSO.2.2 MA.7.NSO.2.3 MA.7.AR.1.1 MA.7.AR.1.2 MA.7.AR.3.1 MA.7.AR.3.2 MA.7.AR.4.1 MA.7.AR.4.2 MA.7.AR.4.4 MA.7.AR.4.5	• Topic 5: 3-Act Mathematical Modeling • Topic 5: Pick a Project 5A or 5B • Topic 6: 3-Act Mathematical Modeling • Topic 6: Pick a Project 6A • Topic 7: 3-Act Mathematical Modeling • Topic 7: Pick a Project 7A • Topic 8: 3-Act Mathematical Modeling • Topic 8: Pick a Project 8A or 8B	MA.7.AR.2.1 MA.7.GR.1.3 MA.7.GR.1.4 MA.7.GR.2.2 MA.7.DP.1.3 MA.7.DP.1.5 MA.7.DP.2.1 MA.7.DP.2.2 MA.7.DP.2.3

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Florida's B.E.S.T. Standards Mathematics

Mathematical Thinking and Reasoning

Description

MA.K12.MTR.1.1 Actively participate in effortful learning both individually and collectively.	MA.K12.MTR.2.1 Demonstrate understanding by representing problems in multiple ways.
Mathematicians who participate in effortful learning both individually and with others: • Analyze the problem in a way that makes sense given the task. • Ask questions that will help with solving the task. • Build perseverance by modifying methods as needed while solving a challenging task. • Stay engaged and maintain a positive mindset when working to solve tasks. • Help and support each other when attempting a new method or approach. **Clarifications:** **Teachers who encourage students to participate actively in effortful learning both individually and with others:** • Cultivate a community of growth mindset learners. • Foster perseverance in students by choosing tasks that are challenging. • Develop students' ability to analyze and problem solve. • Recognize students' effort when solving challenging problems.	**Mathematicians who demonstrate understanding by representing problems in multiple ways:** • Build understanding through modeling and using manipulatives. • Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations. • Progress from modeling problems with objects and drawings to using algorithms and equations. • Express connections between concepts and representations. • Choose a representation based on the given context or purpose. **Clarifications:** **Teachers who encourage students to demonstrate understanding by representing problems in multiple ways:** • Help students make connections between concepts and representations. • Provide opportunities for students to use manipulatives when investigating concepts. • Guide students from concrete to pictorial to abstract representations as understanding progresses. • Show students that various representations can have different purposes and can be useful in different situations.

MA.K12.MTR.3.1
Complete tasks with mathematical fluency.

Mathematicians who complete tasks with mathematical fluency:
- Select efficient and appropriate methods for solving problems within the given context.
- Maintain flexibility and accuracy while performing procedures and mental calculations.
- Complete tasks accurately and with confidence.
- Adapt procedures to apply them to a new context.
- Use feedback to improve efficiency when performing calculations.

Clarifications:
Teachers who encourage students to complete tasks with mathematical fluency:
- Provide students with the flexibility to solve problems by selecting a procedure that allows them to solve efficiently and accurately.
- Offer multiple opportunities for students to practice efficient and generalizable methods.
- Provide opportunities for students to reflect on the method they used and determine if a more efficient method could have been used.

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Florida's B.E.S.T. Standards Mathematics

Mathematical Thinking and Reasoning

Description

MA.K12.MTR.4.1 Engage in discussions that reflect on the mathematical thinking of self and others.	MA.K12.MTR.5.1 Use patterns and structure to help understand and connect mathematical concepts.
Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others: • Communicate mathematical ideas, vocabulary and methods effectively. • Analyze the mathematical thinking of others. • Compare the efficiency of a method to those expressed by others. • Recognize errors and suggest how to correctly solve the task. • Justify results by explaining methods and processes. • Construct possible arguments based on evidence. **Clarifications:** **Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others:** • Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning. • Create opportunities for students to discuss their thinking with peers. • Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods. • Develop students' ability to justify methods and compare their responses to the responses of their peers.	**Mathematicians who use patterns and structure to help understand and connect mathematical concepts:** • Focus on relevant details within a problem. • Create plans and procedures to logically order events, steps or ideas to solve problems. • Decompose a complex problem into manageable parts. • Relate previously learned concepts to new concepts. • Look for similarities among problems. • Connect solutions of problems to more complicated large-scale situations. **Clarifications:** **Teachers who encourage students to use patterns and structure to help understand and connect mathematical concepts:** • Help students recognize the patterns in the world around them and connect these patterns to mathematical concepts. • Support students to develop generalizations based on the similarities found among problems. • Provide opportunities for students to create plans and procedures to solve problems. • Develop students' ability to construct relationships between their current understanding and more sophisticated ways of thinking.
MA.K12.MTR.6.1 Assess the reasonableness of solutions.	MA.K12.MTR.7.1 Apply mathematics to real-world contexts.
Mathematicians who assess the reasonableness of solutions: • Estimate to discover possible solutions. • Use benchmark quantities to determine if a solution makes sense. • Check calculations when solving problems. • Verify possible solutions by explaining the methods used. • Evaluate results based on the given context. **Clarifications:** **Teachers who encourage students to assess the reasonableness of solutions:** • Have students estimate or predict solutions prior to solving. • Prompt students to continually ask, "Does this solution make sense? How do you know?" • Reinforce that students check their work as they progress within and after a task. • Strengthen students' ability to verify solutions through justifications.	**Mathematicians who apply mathematics to real-world contexts:** • Connect mathematical concepts to everyday experiences. • Use models and methods to understand, represent and solve problems. • Perform investigations to gather data or determine if a method is appropriate. • Redesign models and methods to improve accuracy or efficiency. **Clarifications:** **Teachers who encourage students to apply mathematics to real-world contexts:** • Provide opportunities for students to create models, both concrete and abstract, and perform investigations. • Challenge students to question the accuracy of their models and methods. • Support students as they validate conclusions by comparing them to the given situation. • Indicate how various concepts can be applied to other disciplines.