

Davison Community Schools
3rd Grade Mathematics

Course Outline

Unit 1: Math Tools, Time, and Multiplication
Unit 2: Number Stories and Arrays
Unit 3: Operations
Unit 4: Measurement and Geometry
Unit 5: Fractions and Multiplication Strategies
Unit 6: More Operaitons
Unit7: Fractions
Unit 8: Multiplication and Division
Unit 9: Multidigit Operations

Priority Standards

3.OA.3	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. ¹
3.OA.7	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.
3.OA.8	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. ³
3.NBT.2	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.
3.NF.1	Understand a fraction $1/b$ 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 parts of size $1/b$.
3.NF.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. 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. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram. d. 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 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.

3.MD.1	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.
3.MD.7	<p>Relate area to the operations of multiplication and addition.</p> <p>a. 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.</p> <p>b. 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.</p> <p>c. 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.</p> <p>d. 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.</p>
3.MD.8	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.
3.G.1	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.

Unit Titles and Time Frames

Unit Title	Time Frame	Notes
Week of Inspirational Math	6 days	Lessons Resources on Google Drive
Unit 1: Math Tools, Time, Multiplication	1st MP	
Unit 2: Number Stories and Arrays	1st MP	
Unit 3: Operations	2nd MP	
Unit 4: Measurement and Geometry	2nd MP	
Unit 5: Fractions and Multiplication	3rd MP	
Unit 6: More Operations	3rd MP	
Unit 7: Fractions	4th MP	
Unit 8: Multiplication and Division	4th MP	
Unit 9: Multi Digit Operations	4th MP	

Total days = 140 (this should include any days for assessment or review)

Unit 1: Math Tools, Time, Multiplication

Time Frame	Notes
1st MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NBT.2	
3.MD.1	
3.OA.3	
3.OA.7	

Supporting Standards

3.NBT.1 3.MD.2 3.MD.3
3.OA.1 3.OA.2

Common Assessment(s):

[Google Drive](#)

Progress Check
Open Response

Resource(s)

EM4 Unit 1

Unit 2: Number Stories and Arrays

Time Frame	Notes
1st MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NBT.2	
3.OA.3	
3.OA.7	
3.OA.8	

Supporting Standards

3.OA.1 3.OA.2

Common Assessment(s):

[Google Drive](#)

Progress Check

Cumulative Assessment

Resource(s)

EM4 Unit 2

Unit 3: Operations

Time Frame	Notes
2nd MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NBT.2	
3.OA.7	
3.OA.8	

Supporting Standards

3.OA.1 3.OA.4 3.OA.5
3.NBT.1 3.MD.3

Common Assessment(s):

[Google Drive](#)

Progress Check
Open Response

Resource(s)

EM4 Unit 3

Unit 4: Measurement and Geometry

Time Frame	Notes
2nd MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.G.1	
3.MD.7	
3.MD.8	

Supporting Standards

3.MD.4 3.MD.5 3.MD.5a 3.MD.5b
3.MD.6 3.MD.8

Common Assessment(s):

[Google Drive](#)

Progress Check

Cumulative Assessment

Resource(s)

EM4 Unit 4

Unit 5: Fractions and Multiplication

Time Frame	Notes
3rd MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NF.1	
3.NF.3	
3.OA.7	
3.OA.8	
3.MD.7	

Supporting Standards

3.OA.1

3.OA.4

3.OA.5

3.OA.6

3.OA.9

Common Assessment(s):

[Google Drive](#)

Progress Check

Open Response

Resource(s)

EM4 Unit 5

Unit 6: More Operations

Time Frame	Notes
3rd MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NBT.2	
3.OA.3	
3.OA.7	
3.OA.8	

Supporting Standards

3.OA.5

Common Assessment(s):

[Google Drive](#)

Progress Check

Cumulative Assessment

Resource(s)

EM4 Unit 6

Unit 7: Fractions

Time Frame	Notes
4th MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.NF.1	
3.NF.3	
3.MD.1	

Supporting Standards

3.NF.2 3.NF.2a 3.NF.2b
3.MD.2 3.OA.2

Common Assessment(s):

[Google Drive](#)

Progress Check
Open Response

Resource(s)

EM4 Unit 7

Unit 8: Multiplication and Division

Time Frame	Notes
4th MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
3.OA.3	
3.OA.7	
3.G.1	

Supporting Standards

3.MD.4 3.NBT.3
3.OA.2 3.OA.4 3.OA.6

Common Assessment(s):

[Google Drive](#)

Progress Check

Cumulative Assessment

Resource(s)

EM4 Unit 8

Unit 9: Multi Digit Operations

Time Frame	Notes
4th MP	

Priority Standards and Knowledge and Skills (*Supporting standards to be used)

CCSS Standard	Knowledge and Skills
1.OA.7	
3.MD.1	
3.MD.7	

Supporting Standards

3.NBT.3 3.MD.2
3.OA.2 3.OA.5 3.OA.7

Common Assessment(s):

[Google Drive](#)

Progress Check
Open Response

Resource(s)

EM4 Unit 9