

Digging into Math Program Overview

The Digging into Math Program consists of 9 units covering the Common Core State Standards for Mathematics (CCSSM) from Grades 3, 4 and 5. Each unit contains lessons that specifically address both the content standards and the standards for mathematical practice.

Stage A – Grade 3

Unit		Common Core State Standard Domains and Clusters	
Grade 3	Unit A1 <i>Digging into Operations</i>	OA	<ul style="list-style-type: none"> Represent and solve problems involving multiplication and division. Understand properties of multiplication and the relationship between multiplication and division. Multiply and divide within 100. Solve problems involving the four operations, and identify and explain patterns in arithmetic.
		NBT	<ul style="list-style-type: none"> Use place value understanding and properties of operations to perform multi-digit arithmetic.
		MD	<ul style="list-style-type: none"> Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Represent and interpret data.
	Unit A2 <i>Digging into Fractions</i>	NF	<ul style="list-style-type: none"> Develop understanding of fractions as numbers.
		MD	<ul style="list-style-type: none"> Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Represent and interpret data.
	Unit A3 <i>Digging into Geometry</i>	MD	<ul style="list-style-type: none"> Geometric measurement: understand concepts of area and relate area to multiplication and to addition. Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish linear and area measurements.
		G	<ul style="list-style-type: none"> Reason with shapes and their attributes.

Standards Correlation by Lesson

Unit A1 Digging into Operations	
Lesson	CCSS Alignment
1	3.MD.2
2	3.NBT.1
3	3.NBT.2
4	3.OA.1
5	3.OA.3
6	3.OA.3
7	3.OA.9
8	3.OA.3/3.OA.5/ 3.NBT.3
9	3.OA.2/3.OA.3
10	3.OA.3/3.OA.5
11	3.OA.4/3.OA.6/ 3.OA.7
12	3.OA.8
13	3.MD.3

Unit A2 Digging into Fractions	
Lesson	CCSS Alignment
1	3.NF.1
2	3.NF.2
3	3.NF.3ab
4	3.NF.3cd
5	3.NF.3
6	3.NF.3d
7	3.MD.4
8	3.MD.4

Unit A3 Digging into Geometry	
Lesson	CCSS Alignment
1	3.MD.1
2	3.G.1
3	3.MD.8
4	3.G.2
5	3.MD.5
6	3.MD.6
7	3.MD.7a
8	3.MD.7b
9	3.MD.7c
10	3.MD.7d
11	3.MD.8

Stage B – Grade 4

Unit		Common Core State Standard Domains and Clusters	
Grade 4	Unit B1 Digging into Operations	OA	<ul style="list-style-type: none"> • Use the four operations with whole numbers to solve problems. • Gain familiarity with factors and multiples. • Generate and analyze patterns.
		NBT	<ul style="list-style-type: none"> • Generalize place value understanding for multi-digit whole numbers. • Use place value understanding and properties of operations to perform multi-digit arithmetic.
		MD	<ul style="list-style-type: none"> • Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.
Unit B2 Digging into Fractions	NF	<ul style="list-style-type: none"> • Extend understanding of fraction equivalence and ordering. • Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. • Understand decimal notation for fractions, and compare decimal fractions. 	
	MD	<ul style="list-style-type: none"> • Represent and interpret data. 	
Unit B3 Digging into Geometry	MD	<ul style="list-style-type: none"> • Geometric measurement: understand concepts of angle and measure angles. 	
	G	<ul style="list-style-type: none"> • Draw and identify lines and angles, and classify shapes by properties of their lines and angles. 	

Standards Correlation by Lesson

Unit B1
Digging into Operations

Lesson	CCSS Alignment
1	4.NBT.1/ 4.NBT.2
2	4.NBT.3
3	4.NBT.4
4	4.OA.1/4.OA.2
5	4.OA.2
6	4.NBT.5
7	4.NBT.5
8	4.NBT.6
9	4.NBT.6
10	4.OA.4
11	4.OA.3
12	4.OA.5
13	4.MD.1
14	4.MD.1/4.MD.2

Unit B2
Digging into Fractions

Lesson	CCSS Alignment
1	4.NF.1
2	4.NF.2
3	4.NF.2
4	4.NF.3
5	4.NF.3
6	4.NF.3
7	4.NF.3
8	4.NF.4
9	4.MD.4
10	4.NF.6
11	4.NF.7
12	4.NF.6
13	4.NF.5

Unit B3
Digging into Geometry

Lesson	CCSS Alignment
1	4.MD.3
2	4.MD.5
3	4.MD.6
4	4.MD.7
5	4.G.1
6	4.G.2
7	4.G.3

Stage C – Grade 5

Unit		Common Core State Standard Domains and Clusters	
Grade 5	Unit C1 Digging into Operations	OA	<ul style="list-style-type: none"> • Write and interpret numerical expressions. • Analyze patterns and relationships.
		NBT	<ul style="list-style-type: none"> • Understand the place value system. • Perform operations with multi-digit whole numbers and with decimals to hundredths.
		MD	<ul style="list-style-type: none"> • Convert like measurement units within a given measurement system.
		G	<ul style="list-style-type: none"> • Graph points on the coordinate plane to solve real-world and mathematical problems.
	Unit C2 Digging into Fractions	NF	<ul style="list-style-type: none"> • Use equivalent fractions as a strategy to add and subtract fractions. • Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
		MD	<ul style="list-style-type: none"> • Represent and interpret data.
	Unit C3 Digging into Geometry	MD	<ul style="list-style-type: none"> • Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
		G	<ul style="list-style-type: none"> • Classify two-dimensional figures into categories based on their properties.

Standards Correlation by Lesson

Unit C1 Digging into Operations	
Lesson	CCSS Alignment
1	5.NBT.5
2	5.NBT.6
3	5.NBT.6
4	5.NBT.3
5	5.NBT.3/ 5.NBT.4
6	5.NBT.7
7	5.NBT.7
8	5.NBT.7
9	5.MD.1
10	5.NBT.1/ 5.NBT.2
11	5.OA.1/5.OA.2
12	5.G.1
13	5.G.2
14	5.OA.3

Unit C2 Digging into Fractions	
Lesson	CCSS Alignment
1	5.NF.2
2	5.NF.1
3	5.NF.1
4	5.NF.1/5.NF.2/ 5.NF.3
5	5.NF.1
6	5.NF.1/5.NF.2
7	5.NF.1/5.NF.2
8	5.NF.1/5.NF.2
9	5.NF.4/5.NF.6
10	5.NF.4/5.NF.5/ 5.NF.6
11	5.NF.7
12	5.MD.2

Unit C3 Digging into Geometry	
Lesson	CCSS Alignment
1	5.G.3/5.G.4
2	5.G.3/5.G.4
3	5.G.3/5.G.4
4	5.MD.3
5	5.MD.4
6	5.MD.5a
7	5.MD.5b
8	5.MD.5c