

COMMON CORE Standards Plus[®]



Mathematics

GRADE 3

Teacher Edition



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Common Core Standards Plus® - Mathematics Grade 3

What is Common Core Standards Plus?

Research Behind Standards Plus:

Common Core Standards Plus is produced by Learning Plus Associates, a Nonprofit Public Benefit Corporation dedicated to creating and providing solutions that increase student achievement and support teacher delivery of high-quality, effective instruction on a daily basis. The lessons are based upon the research of Effective Schools Correlates, Edward Deming's Total Quality Management (TQM), and models of effective instruction. A team of content and grade level experts wrote the Common Core Standards Plus lessons to meet the skills, concepts, depth, and rigor of the Common Core Standards.

What is Standards Plus?

Standards Plus is a set of research-based, supplemental K-8 language arts and math materials written to the Common Core Standards. These explicit direct instruction lessons were designed to teach discrete elements of the Common Core Standards.

Benefits:

- Ready-to-teach lessons and projects with very little teacher prep
- Grade level content vocabulary is taught within the context of the lessons.
- Increases student and teacher understanding of the standards
- A year's worth of daily lessons, performance lessons, and integrated projects ensure that all students have equal access to standards at every level of rigor (DOK 1-4)
- Prepares students for the state assessment

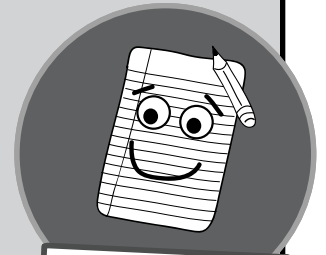
Three Types of Lessons:

Daily Lessons and Weekly Assessments (Evaluations):

(15-20 minutes daily)

There are 34 weeks of daily lessons and assessments (evaluations) written directly to the standards.

A week of instruction is comprised of **four lessons** and a **corresponding assessment**. The daily lessons are written to DOK Levels 1 and 2.



Daily Lessons & Weekly Assessments

Performance Lessons:

(3-5 days 30 minutes each day)

After one or more weeks of daily lessons written to a particular standard or topic, you will find a Performance Lesson. Performance Lessons are written to DOK Level 3.

These lessons require that students apply what they have learned and use reasoning, planning, evidence, and a higher level of thinking than the daily lessons. Many standards are assessed at this level of rigor on state assessments.

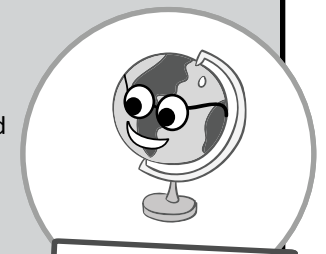


Performance Lessons

Integrated Projects:

(Multiple class sessions over several days or weeks)

Three Integrated Projects are located immediately after the supporting daily lessons, assessments, and performance lessons. Integrated Projects require that students plan, synthesize information, produce high-quality products, and present their findings. Integrated Projects are written to DOK level 4.



Integrated Projects

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Delivering the Daily Lessons



Prepare to Teach/Plan Instruction

Select the week of instruction you will be teaching. View the sample pacing on pages 8-9 or create your own pacing to match the content and standards of Standards Plus lessons to classroom instruction, district pacing guides, or benchmark information.



A **week of instruction** is a set of four daily lessons and a weekly assessment.



Preview the Week of Instruction (5 minutes)

Look at the teacher lesson plans for all four lessons paying particular attention to the standard(s), lesson objective, and introduction. Those three pieces of information will identify what students will learn and be able to do. Quickly scan the student page to gain an understanding of what students will be expected to do in independent practice. Repeat this process for the next three lessons and the assessment. This will give you a clear picture of how the week unfolds and will help you keep the daily lessons focused and concise.



Prepare to Teach a Daily Lesson (5 minutes)

- Read the entire teacher lesson plan.
- Identify academic vocabulary.
- Determine your instructional focus, “What do I want students to know and do by the end of today’s lesson?”
- Consider any relevant prior knowledge connections you can share with students, so they can connect the new learning to previous learning.



Teach a Daily Lesson (15-20 minutes)



1. **Project the student lesson**
2. **Read the standard(s)** aloud with students, highlighting the part of the standard being taught in today’s lesson.
3. **Read the Introduction** provided in the Teacher Edition or provide your own.
4. **Read the Instruction aloud to students.**
Focus on new academic vocabulary, teaching the concept directly, and modeling the concept for students.
5. **Read the Guided Practice** and work through the examples together with students, sharing your thoughts aloud as you work through the item(s) step-by-step.
 - Monitor the class – If students are struggling, DO NOT MOVE onto Independent Practice, continue with Guided Practice.

6. **Read the Independent Practice and/or the Directions.**
 - Continue to monitor the class to catch common errors or misconceptions and correct immediately.
 - Differentiate instruction for struggling students by assigning fewer items.
 - Prompt and praise students for making attempts.
7. **Complete the Review**
 - Review answers when all students have completed Independent Practice or when your timeframe has expired.
 - Have students correct their mistakes or improve their answers.
8. **Read the Closure**
 - Read or paraphrase the closure or have students summarize the important concepts or skills learned in the lesson.

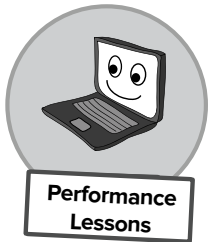
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Delivering the Lessons



Weekly Formative Assessments (Evaluations)

- Formative assessments that include items that match the week's instruction.
- Use these assessments to identify students' understanding of the concept taught and identify students for intervention.



Prepare to Teach a Performance Lesson

Allocate 30 minutes a day for 3-5 days to complete a performance lesson.

Periodically



Preview the Entire Performance Lesson (5-10 Minutes)

- Read the teacher lesson plan (1-2 pages) and student pages
- Focus on the standards listed at the top of the teacher page, the Lesson Objective, and the Overview. This information will provide a broad overview of the performance lessons.

NOTE: Performance lessons are more complex and more difficult for students than the daily lessons. **Performance lessons must be taught, not assigned.** Each performance lesson *has a large guided practice section*. This is so that the teacher can model and guide students through each component of the lesson. These lessons teach students how to successfully complete a performance task.



Prepare to Teach an Integrated Project

Multiple class sessions over several days or weeks.

3 Times a Year



Preview the Entire Integrated Project (10-15 Minutes)

- Previewing the project will provide an overview of the standards and components of the project.
- This allows the teacher to gain an understanding of how several different standards can be taught and evaluated.

NOTE: Even if you are not planning to teach a Standards Plus Integrated Project, it is helpful to view the components of the project listed in the Teacher Edition. It provides a broad look at how to integrate many topics and standards. It is a good reminder for teachers to include standards and expectations often overlooked, whether it is planning and delivering an opinion speech, or using technology to produce and publish writing as well as to interact and collaborate with others. Each project component may take up to a week or two of instruction.

Helpful Hint

To ensure all heavily-weighted standards are taught prior to state testing, you may need to teach a Performance Lesson and/or a component of an Integrated Project **in addition to** a week of Daily Lessons. **See PBL sample pacing on page 10-11 for an example.**

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Suggested Pacing



Standards Plus is supplemental and **does not** have to be taught in the printed order.

The pacing guide below provides instruction of the **most heavily-weighted standards in the 26 weeks prior to state testing.**

Suggested Pacing Guide

WEEK	DOMAIN/TOPIC, LESSON (L), EVALUATIONS (E)	STANDARD(S)	TE PG#	DOK
1	Number & Operations in Base Ten L1-4, E1	3.NBT.1	28-37	DOK 1-2
2	Number & Operations in Base Ten L5-8, E2	3.NBT.1	38-47	DOK 1-2
Performance Lesson 1 – Round It Off		3.NBT.1	48	DOK 3
3	Operations & Algebraic Thinking L1-4, E1	3.OA.1	106-115	DOK 1-2
4	Operations & Algebraic Thinking L5-8, E2	3.OA.2	116-125	DOK 1-2
5	Operations & Algebraic Thinking L9-12, E3	3.OA.3	126-135	DOK 1-2
6	Operations & Algebraic Thinking L13-16, E4	3.OA.4	136-145	DOK 1-2
Performance Lesson 2 – Products & Quotients		3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4	146-147	DOK 3
7	Operations & Algebraic Thinking L17-20, E5	3.OA.5	152-161	DOK 1-2
8	Operations & Algebraic Thinking L21-24, E6	3.OA.6	162-171	DOK 1-2
9	Operations & Algebraic Thinking L25-28, E7	3.OA.7	172-181	DOK 1-2
10	Operations & Algebraic Thinking L29-32, E8	3.OA.7	182-191	DOK 1-2
Performance Lesson 4 – Properties & Strategies		3.OA.5, 3.OA.6, 3.OA.7	192-193	DOK 3
11	Number & Operations in Base Ten L21-24, E6	3.NBT.3	88-97	DOK 1-2
12	Operations & Algebraic Thinking L33-36, E9	3.OA.8	198-207	DOK 1-2
13	Operations & Algebraic Thinking L37-40, E10	3.OA.9	208-217	DOK 1-2
Performance Lesson 5 – Equations & Patterns		3.OA.8, 3.OA.9	218	DOK 3
14	Measurement & Data L1-4, E1	3.MD.1	242-251	DOK 1-2
15	Measurement & Data L5-8, E2	3.MD.2	252-261	DOK 1-2
16	Measurement & Data L17-20, E5	3.MD.5	290-299	DOK 1-2
17	Measurement & Data L21-24, E6	3.MD.6	300-309	DOK 1-2
18	Measurement & Data L25-28, E7	3.MD.7	310-319	DOK 1-2
Performance Lesson 7 – All About Area		3.MD.5, 3.MD.6, 3.MD.7	320-321	DOK 3
19	Measurement & Data L29-32, E8	3.MD.7	326-335	DOK 1-2
20	Measurement & Data L33-36, E9	3.MD.7	336-345	DOK 1-2
21	Measurement & Data L37-40, E10	3.MD.7	346-355	DOK 1-2
Performance Lesson 8 – Area Problem Solving		3.MD.7	356	DOK 3
22	Number & Operations – Fractions L1-4, E1	3.NF.1	392-401	DOK 1-2
23	Number & Operations – Fractions L5-8, E2	3.NF.2a, 3.NF.2b	402-411	DOK 1-2
Performance Lesson 10 – Modeling Fractions		3.NF.1, 3.NF.2a, 3.NF.2b	412-413	DOK 3
24	Number & Operations – Fractions L9-12, E3	3.NF.3a, 3.NF.3c	418-427	DOK 1-2
25	Number & Operations – Fractions L13-16, E4	3.NF.3b	428-437	DOK 1-2
26	Number & Operations – Fractions L17-20, E5	3.NF.3d	438-447	DOK 1-2
Performance Lesson 11 – Is It Equivalent?		3.NF.3a, 3.NF.3b, 3.NF.3c, 3.NF.3d	448-449	DOK 3
STATE TESTING BEGINS				

↪ Suggested pacing continues at the top of the next page.



Daily Lessons & Weekly Assessments

Each white row represents a week of instruction.

A week of instruction includes four daily lessons (L) and a weekly formative assessment /evaluation (E).



Performance Lessons

Each shaded row represents a performance lesson.

Performance lessons may take up to three 30-minute sessions to complete.

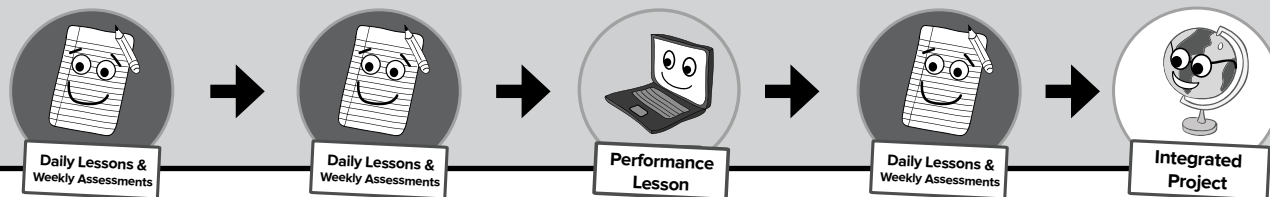
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Suggested Pacing Continued

Suggested Pacing Guide Continued

↓ These lessons are scheduled to be taught after state testing begins or they may be taught as needed throughout the year to support instruction. ↓				
WEEK	DOMAIN/TOPIC, LESSON (L), EVALUATIONS (E)	STANDARD(S)	TE PG#	DOK
27	Number & Operations in Base Ten L9-12, E3	3.NBT.2	52-61	DOK 1-2
28	Number & Operations in Base Ten L13-16, E4	3.NBT.2	62-71	DOK 1-2
29	Number & Operations in Base Ten L17-20, E5	3.NBT.2	72-81	DOK 1-2
Performance Lesson 2 – Addition & Subtraction Strategies		3.NBT.2	82	DOK 3
30	Measurement & Data L9-12, E3	3.MD.3	262-271	DOK 1-2
31	Measurement & Data L13-16, E4	3.MD.4	272-281	DOK 1-2
Performance Lesson 6 – Gathering & Displaying Measures		3.MD.1, 3.MD.2, 3.MD.3, 3.MD.4	282-283	DOK 3
32	Measurement & Data L41-44, E11	3.MD.8	360-369	DOK 1-2
Performance Lesson 9 – Around the Perimeter		3.MD.8	370	DOK 3
33	Geometry L1-4, E1	3.G.1	458-467	DOK 1-2
34	Geometry L5-8, E2	3.G.2	468-477	DOK 1-2
Performance Lesson 12 – Shapes, Attributes, and Area		3.G.1, 3.G.2	478	DOK 3

Developing Your Own Standards Plus Pacing is Easy



The Common Core Standards Plus lessons can be easily paced to match:

- Core publisher textbooks
- District or site pacing
- District benchmarks

Here's How:

The Lesson Index found on pages **12-18** lists the Domain, Lesson Focus, and Standard(s) taught in each lesson. Every week of instruction (four Daily Lessons & a Weekly Assessment), Performance Lesson, and an Integrated Project is included in the lesson index. Use the Strand, Lesson Focus, or Standard listed on the Lesson Index to match the Standards Plus content to your own textbooks, units, or pacing. Schedule the Daily Lessons that lead up to each Performance Lesson to ensure students can apply the skills and concepts taught in the Daily Lessons.

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Project-Based Learning Pacing

Pacing Explanation:

Standards Plus materials are Common Core by design. They offer instruction at all four levels of Webb’s Depth of Knowledge (DOK 1-4), and they include three instructional components (Daily Lessons, Performance Lessons, and Integrated projects) that can be scheduled to support Project-Based Learning. Each grade level and subject may be organized into three distinct sets of instruction that include several weeks of Daily Lessons and Weekly Assessments (evaluations), multiple Performance Lessons, and an Integrated Project.

If you are using Common Core Standards Plus to support Project-Based Learning, here’s an example of how you might schedule the instruction to fit your instructional day:

Week	Monday	Tuesday	Wednesday	Thursday	Friday
10	<i>Operations & Algebraic Thinking Lesson 13</i>	<i>Operations & Algebraic Thinking Lesson 14</i>	<i>Operations & Algebraic Thinking Lesson 15</i>	<i>Operations & Algebraic Thinking Lesson 16</i>	<i>Operations & Algebraic Thinking Evaluation 4</i>
	<i>Performance Lesson 3: Products & Quotients</i>				
	<i>Project Component: Reporting the Information</i>				



This is an example of a week of PBL instruction that includes instruction at **every level of rigor**. In this example, you teach the Daily Lessons, a Performance Lesson, and a component of an Integrated Project in one week.

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Project-Based Learning Pacing

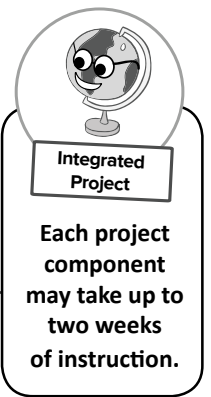
16-Week PBL Plan

WEEK	STRAND, LESSONS, EVALUATIONS (E)	INTEGRATED PROJECT COMPONENTS
1	Number and Operations in Base Ten 1-4, E1	<i>Integrated Project #1 What's the Problem?</i>
2	No. & Operations in Base Ten 5-8, E2 / <i>*Performance Lesson 1</i>	
3	Number and Operations in Base Ten 9-12, E3	Analyzing the Factors
4	Number and Operations in Base Ten 13-16, E4	
5	No. & Operations in Base Ten 17-20, E5 / <i>*Performance Lesson 2</i>	Solve Multiplication Problems Using Strategies
6	Number and Operations in Base Ten 21-24, E6	
7	Operations and Algebraic Thinking 1-4, E1	Modeling Solutions
8	Operations and Algebraic Thinking 5-8, E2	Modeling Solutions
9	Operations and Algebraic Thinking 9-12, E3	
10	Operations & Alg. Thinking 13-16, E4 / <i>*Performance Lesson 3</i>	Reporting the Information
11	Operations and Algebraic Thinking 17-20, E5	Reporting the Information
12	Operations and Algebraic Thinking 21-24, E6	
13	Operations and Algebraic Thinking 25-28, E7	Creating the Final Product
14	Operations & Alg. Thinking 29-32, E8 / <i>*Performance Lesson 4</i>	Creating the Final Product
15	Operations and Algebraic Thinking 33-36, E9	Creating the Final Product
16	Operations & Alg. Thinking 37-40, E10 / <i>*Performance Lesson 5</i>	Submitting the Final Product



11-Week PBL Plan

17	Measurement and Data 1-4, E1	<i>Integrated Project #2 Box It Up!</i>
18	Measurement and Data 5-8, E2	
19	Measurement and Data 9-12, E3	Deconstructing the Prompt
20	Measurement and Data 13-16, E4 / <i>*Performance Lesson 6</i>	Choosing Measuring Units for the Project
21	Measurement and Data 17-20, E5	
22	Measurement and Data 21-24, E6	Determine How to Gather & Record Data
23	Measurement and Data 25-28, E7 / <i>*Performance Lesson 7</i>	Gather and Record the Data
24	Measurement and Data 29-32, E8	Gather and Record the Data
25	Measurement and Data 33-36, E9	Designing the Poster
26	Measurement and Data 37-40, E10 / <i>*Performance Lesson 8</i>	Designing the Poster
27	Measurement and Data 41-44, E11 / <i>*Performance Lesson 9</i>	Presenting the Final Product



7-Week PBL Plan

28	Number and Operations – Fractions 1-4, E1	<i>Integrated Project #3 Planning a Patio</i>
29	No. & Operations – Fractions 5-8, E2 / <i>*Performance Lesson 10</i>	
30	Number and Operations – Fractions 9-12, E3	Explore Five Shapes, w/ Fractional Values
31	Number and Operations – Fractions 13-16, E4	Determine How to Have A Rectangular Patio with Straight Edges
32	No. & Operations – Fractions 17-20, E5 / <i>*Performance Lesson 11</i>	Determine Total Number of Wholes in the Design
33	Geometry 1-4, E1	Use Fractional Values to Express Area
34	Geometry 5-8, E2 / <i>*Performance Lesson 12</i>	Drawing the Patio
		Presenting the Final Product

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Lesson Index

Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Number and Operations in Base Ten (Number and Operations in Base Ten 3.NBT.1 – 3.NBT.3)	1	Rounding to the Nearest 10	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	28	3	1-2	
	2	Rounding to the Nearest 10		30	4		
	3	Rounding to the Nearest 100		32	5		
	4	Rounding to the Nearest 100		34	6		
	E1	Evaluation - Rounding to the Nearest 10 or 100		36	7		
	5	Rounding to the Nearest 10	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	38	9	1-2	
	6	Rounding to the Nearest 100		40	10		
	7	Rounding to the Nearest 10 or 100		42	11		
	8	Rounding to the Nearest 10 or 100		44	12		
	E2	Evaluation - Rounding to the Nearest 10 and 100		46	13		
	P1	Performance Lesson #1 – Round it Off (3.NBT.1)			48	15-17	3
	9	Addition Strategies	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.	52	19	1-2	
	10	Addition Strategies		54	20		
	11	Addition Strategies		56	21		
	12	Addition Strategies		58	22		
	E3	Evaluation - Addition Strategies		60	23		
	13	Subtraction Strategies	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.	62	25	1-2	
	14	Subtraction Strategies		64	26		
	15	Subtraction Strategies		66	27		
	16	Subtraction Strategies		68	28		
	E4	Evaluation - Subtraction Strategies		70	29		
	17	Addition Properties	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.	72	31	1-2	
	18	Addition Properties		74	32		
	19	Addition Properties		76	33		
	20	Addition Properties		78	34		
	E5	Evaluation - Addition Properties		80	35		
	P2	Performance Lesson #2 – Addition & Subtraction Strategies (3.NBT.2)			82	37-40	3
	21	Multiply One-digit Numbers by Multiples of 10	3.NBT.3: Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	88	41	1-2	
22	Multiply One-digit Numbers by Multiples of 10	90		42			
23	Multiply One-digit Numbers by Multiples of 10	92		43			
24	Multiply One-digit Numbers by Multiples of 10	94		44			
E6	Evaluation - Multiply One-digit Numbers by Multiples of 10	96		45			

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Lesson Index

Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Operations and Algebraic Thinking (Operations and Algebraic Thinking Standards 3.OA.1 – 3.OA.9)	1	Products of Whole Numbers	3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i>	106	47	1-2	
	2	Products of Whole Numbers		108	48		
	3	Products of Whole Numbers		110	49		
	4	Products of Whole Numbers		112	50		
	E1	Evaluation - Products of Whole Numbers		114	51		
	5	Quotients of Whole Numbers	3.OA.2 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. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i>	116	53	1-2	
	6	Quotients of Whole Numbers		118	54		
	7	Quotients of Whole Numbers		120	55		
	8	Quotients of Whole Numbers		122	56		
	E2	Evaluation - Quotients of Whole Numbers		124	57		
	9	Representing Word Problems	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.	126	59	1-2	
	10	Representing Word Problems		128	60		
	11	Representing Word Problems		130	61		
	12	Representing Word Problems		132	62		
	E3	Evaluation - Representing Word Problems		134	63		
	13	Relating Three Whole Numbers	3.OA.4: Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \square \div 3$, $6 \times 6 = ?$.</i>	136	65	1-2	
	14	Relating Three Whole Numbers		138	66		
	15	Relating Three Whole Numbers		140	67		
	16	Relating Three Whole Numbers		142	68		
	E4	Evaluation - Relating Three Whole Numbers		144	69		
	P3	Performance Lesson #3 – Products & Quotients (3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4)			146-147	71-74	3
	17	Properties of Multiplication	3.OA.5: Apply properties of operations as strategies to multiply and divide. <i>2 Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i>	152	75	1-2	
	18	Properties of Multiplication		154	76		
	19	Properties of Multiplication		156	77		
20	Properties of Multiplication	158		78			
E5	Evaluation - Properties of Multiplication	160		79			
21	Inverse Operations	3.OA.6 Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i>	162	81	1-2		
22	Inverse Operations		164	82			
23	Inverse Operations		166	83			
24	Inverse Operations		168	84			
E6	Evaluation - Inverse Operations		170	85			

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Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Operations and Algebraic Thinking (Operations and Algebraic Thinking Standards 3.OA.1 – 3.OA.9)	25	Strategies for Multiplication Facts	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.	172	87	1-2	
	26	Strategies for Multiplication Facts		174	88		
	27	Strategies for Multiplication Facts		176	89		
	28	Strategies for Multiplication Facts		178	90		
	E7	Evaluation - Strategies for Multiplication Facts		180	91		
	29	Strategies for Multiplication Facts	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.	182	93	1-2	
	30	Strategies for Multiplication Facts		184	94		
	31	Strategies for Multiplication Facts		186	95		
	32	Strategies for Multiplication Facts		188	96		
	E8	Evaluation - Strategies for Multiplication Facts		190	97		
	P4	Performance Lesson #4 – <i>Properties & Strategies (3.OA.5, 3.OA.6, 3.OA.7)</i>			192-193	99-102	3
	33	Solve Two-step Problems	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.	198	103	1-2	
	34	Solve Two-step Problems		200	104		
	35	Solve Two-step Problems		202	105		
	36	Solve Two-step Problems		204	106		
	E9	Evaluation - Solve Two-step Problems		206	107		
	37	Identify & Explain Arithmetic Patterns	3.OA.9: Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i>	208	109	1-2	
	38	Identify & Explain Arithmetic Patterns		210	110		
	39	Identify & Explain Arithmetic Patterns		212	111		
	40	Identify & Explain Arithmetic Patterns		214	112		
E10	Evaluation - Identify & Explain Arithmetic Patterns	216		113			
P5	Performance Lesson #5 – <i>Equations & Patterns (3.OA.8, 3.OA.9)</i>			218	115-116	3	
Integrated Project #1: <i>What's the Problem?</i> (3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.6, 3.OA.7, 3.OA.8, 3.OA.9, 3.NBT.1, 3.NBT.2, 3.NBT.3)				223-227	117-118	4	
<p>Prerequisite Common Core Standards Plus Domains: <i>Number and Operations in Base Ten and Operations and Algebraic Thinking</i></p> <p>Product: A written report based on a set of multiplication facts that includes information about each of the factors in the problems and how to solve the problems.</p> <p>Overview: In this project, the students will each be assigned a single set of multiplication facts. They will analyze the factors, ways to solve the problems, and ways to model solutions. They will provide a written report of their findings. Since this is a learning activity, all components will be completed in class.</p>							

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Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Measurement and Data (Measurement and Data Standards 3.MD.1 – 3.MD.8)	1	Time Telling	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.	242	119	1-2	
	2	Elapsed Time		244	120		
	3	Elapsed Time Using a Number Line		246	121		
	4	Elapsed Time Using a Number Line		248	122		
	E1	Evaluation - Telling Time		250	123		
	5	Liquid Volume – Liters and Milliliters	3.MD.2: Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 6 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 (such as a beaker with a measurement scale) to represent the problem. ⁷	252	125	1-2	
	6	Liquid Volume – Liters and Milliliters		254	126		
	7	Mass – Grams and Kilograms		256	127		
	8	Mass – Grams and Kilograms		258	128		
	E2	Evaluation - Problems Involving Mass & Liquid Volume		260	129		
	9	Drawing Picture Graphs	3.MD.3: Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>	262	131	1-2	
	10	Drawing Picture Graphs		264	132		
	11	Drawing Bar Graphs		266	133		
	12	Drawing Bar Graphs		268	134		
	E3	Evaluation - Scaled Bar and Picture Graphs		270	135		
	13	Measuring to the Nearest Half & Quarter Inch	3.MD.4: 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.	272	137	1-2	
	14	Measuring to the Nearest Half & Quarter Inch		274	138		
	15	Representing Measurement Data on a Line Plot		276	139		
	16	Representing Measurement Data on a Line Plot		278	140		
	E4	Evaluation - Linear Measurement and Line Plots		280	141		
	P6	Performance Lesson #6 – Gathering & Displaying Measures (3.MD.1, 3.MD.2, 3.MD.3, 3.MD.4)			282-283	143-147	3
	17	Understanding Area – Square Units	3.MD.5: Recognize area as an attribute of plane figures and understand concepts of area measurement. 3.MD.5a: 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. 3.MD.5b: 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.	290	149	1-2	
	18	Understanding Area – Square Units		292	150		
	19	Understanding Area – Square Units		294	151		
	20	Understanding Area – Square Units		296	152		
	E5	Evaluation - Understanding Area – Square Units		298	153		
21	Understanding Area – Square Units	3.MD.6: Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	300	155	1-2		
22	Understanding Area – Square Feet		302	156			
23	Understanding Area – Square Centimeters		304	157			
24	Understanding Area – Square Meters		306	158			
E6	Evaluation - Understanding Area – Different Unit Measures		308	159			

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Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Measurement and Data (Measurement and Data Standards 3.MD.1 – 3.MD.8)	25	Relate Area – Multiplying Side Lengths	3.MD.7: Relate area to the operations of multiplication and addition. 3.MD.7a: 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.	310	161	1-2	
	26	Relate Area – Multiplying Side Lengths		312	162		
	27	Relate Area – Multiplying Side Lengths		314	163		
	28	Relate Area – Multiplying Side Lengths		316	164		
	E7	Evaluation - Relate Area – Multiply Side Lengths		318	165		
	P7	Performance Lesson #7 – All About Area (3.MD.5, 3.MD.6, 3.MD.7)			320-321	167-169	3
	29	Relate Area – Solve Real World Problems	3.MD.7: Relate area to the operations of multiplication and addition. 3.MD.7b: 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.	326	171	1-2	
	30	Relate Area – Solve Real World Problems		328	172		
	31	Relate Area – Solve Real World Problems		330	173		
	32	Relate Area – Solve Real World Problems		332	174		
	E8	Evaluation - Relate Area – Solve Real World Problems		334	175		
	33	Relate Area – Distributive Property	3.MD.7: Relate area to the operations of multiplication and addition. 3.MD.7c: 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.	336	177	1-2	
	34	Relate Area – Distributive Property		338	178		
	35	Relate Area – Distributive Property		340	179		
	36	Relate Area – Distributive Property		342	180		
	E9	Evaluation - Relate Area – Distributive Property		344	181		
	37	Decomposing Rectilinear Figures	3.MD.7: Relate area to the operations of multiplication and addition. 3.MD.7d: Recognize 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.	346	183	1-2	
	38	Decomposing Rectilinear Figures		348	184		
	39	Decomposing Rectilinear Figures		350	185		
	40	Decomposing Rectilinear Figures		352	186		
	E10	Evaluation - Decomposing Rectilinear Figures		354	187		
	P8	Performance Lesson #8 – Area Problem Solving (3.MD.7)			356	189-191	3
	41	Perimeter of Polygons	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.	360	193	1-2	
	42	Perimeter of Polygons – Finding Missing Side Lengths		362	194		
	43	Rectangles – Same Perimeter vs. Different Area		364	195		
	44	Rectangles – Same Perimeter vs. Different Area		366	196		
	E11	Evaluation - Perimeter and Area Connections		368	197		
	P9	Performance Lesson – Around the Perimeter (3.MD.8)			370	199-202	3
	Integrated Project #2: Box It Up! (3.MD.4, 3.MD.5, 3.MD.5a, 3.MD.5b, 3.MD.6, 3.MD.7, 3.MD.7a, 3.MD.7b, 3.MD.7c, 3.MD.7d, 3.MD.8)				377-381	203-205	4
Prerequisite Common Core Standards Plus Domains: Measurement and Data							
Product: A poster and oral presentation that provides information about the dimensions, perimeter, and area of a box.							
Overview: In this project, the students will use an actual box to collect data on the dimensions, perimeter, and area. They will create a poster that displays the data they gather. Each student will present his/her poster orally. Since this is a learning activity, all components will be completed in class.							

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Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Number and Operations – Fractions (Number and Operations – Fractions Standards 3.NF.1, 3.NF.2a-b, 3.NF.3a-d)	1	Understand Fractions as Part of a Whole	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 $1/b$.	392	207	1-2	
	2	Understand Fractions as Part of a Whole		394	208		
	3	Understand Fractions as Part of a Whole		396	209		
	4	Understand Fractions as Part of a Whole		398	210		
	E1	Evaluation - Understand Fractions as Part of a Whole		400	211		
	5	Fractions on a Number Line	3.NF.2a: 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.	402	213	1-2	
	6	Fractions on a Number Line	404	214			
	7	Fractions on a Number Line	3.NF.2b: Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	406	215		
	8	Fractions on a Number Line	408	216			
	E2	Evaluation - Fractions on a Number Line	3.NF.2a, 3.NF.2b	410	217		
	P10	Performance Lesson #10 – Modeling Fractions (3.NF.1, 3.NF.2a, 3.NF.2b)			412-413	219-221	3
	9	Understand Equivalent Fractions	3.NF.3a: Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	418	223	1-2	
	10	Understand Equivalent Fractions		420	224		
	11	Equivalent Fractions & Whole Numbers	3.NF.3c: Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>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.</i>	422	225		
	12	Equivalent Fractions & Whole Numbers		424	226		
	E3	Evaluation - Equivalent Fractions & Whole Numbers	3.NF.3a, 3.NF.3c	426	227		
	13	Simple Equivalent Fractions	3.NF.3b 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.	428	229	1-2	
	14	Simple Equivalent Fractions		430	230		
	15	Simple Equivalent Fractions		432	231		
	16	Simple Equivalent Fractions		434	232		
E4	Evaluation - Simple Equivalent Fractions	436		233			
17	Comparing Fractions	3.NF.3d 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.	438	235	1-2		
18	Comparing Fractions		440	236			
19	Comparing Fractions		442	237			
20	Comparing Fractions		444	238			
E5	Evaluation - Comparing Fractions		446	239			
P11	Performance Lesson #11 – Is It Equivalent? (3.NF.3a, 3.NF.3b, 3.NF.3c, 3.NF.3d)			448-449	241-242	3	

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Domain	Lesson	Focus	Standard(s)	TE Page	St. Ed. Page	DOK Level	
Geometry (Geometry Standards: 3.G.1 – 3.G.2)	1	Recognizing & Categorizing Shapes	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.	458	243	1-2	
	2	Recognizing & Categorizing Shapes		460	244		
	3	Recognizing & Categorizing Shapes		462	245		
	4	Recognizing & Categorizing Shapes		464	246		
	E1	Evaluation - Recognizing & Categorizing Shapes		466	247		
	5	Partition Shapes and Express Area as a Unit Fraction	3.G.2: Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.</i>	468	249	1-2	
	6	Partition Shapes and Express Area as a Unit Fraction		470	250		
	7	Partition Shapes and Express Area as a Unit Fraction		472	251		
	8	Partition Shapes and Express Area as a Unit Fraction		474	252		
	E2	Evaluation - Partition Shapes and Express Area as a Unit Fraction		476	253		
	P12	Performance Lesson #12 – Shapes, Attributes, and Area (3.G.1, 3.G.2)			478	255-257	3
	Integrated Project #3: Planning a Patio (3.NF.1, 3.NF.2, 3.NF.2A, 3.NF.2b, 3.NF.3, 3.NF.3a, 3.NF.3b, 3.NF.3c, 3.G.1, 3.G.2)				485-488	259-262	4
<p>Prerequisite Common Core Standards Plus Domains: <i>Number and Operations – Fractions and Geometry</i></p> <p>Product: A patio design and oral presentation based on fractional units, area, and shapes.</p> <p>Overview: In this project, the students will design a patio that is composed of hexagonal, rhomboid, trapezoidal, square, and triangular pavers. The hexagonal paver represents a whole, and the other four shapes represent 1/2, 1/4, and 1/8 respectively. Each student will present his/her patio design orally. Since this is a learning activity, all components will be completed in class.</p>							

