

Using Investigations to Teach the Common Core State Standards at Grade 3

Investigations is a focused and coherent K-5 curriculum, intentionally designed and sequenced to promote a deep understanding of mathematics. The curriculum units at each grade level represent a cohesive whole, not separate parts. Each successive unit builds on the previous unit, both within and across strands, and across grades. The geometry and measurement, data, and patterns and functions units focus on foundational mathematical ideas and practices and also support work in the number and operations units. By teaching the *Investigations* curriculum as written, students go deeply into mathematical practices and content.

The CCSS in Grade 3. Most of the CCSS content standards are met by teaching the third grade units, in order, as is. *Investigations and the Common Core State Standards at Grade 3* provides new content so that all standards are covered.¹ In most cases, these Standards are also addressed by existing material in the *Investigations* curriculum. New activities and Sessions build on what is in the curriculum to introduce new ideas or extend existing ones. New Math/Teaching Notes, Ten-Minute Math activities, and pages for additional practice address language, vocabulary, notation, or levels of fluency specific to the CCSS.

Math Idea(s) ²	CCSS	Additional Content	Unit
	Standard		
Write "equations with a symbol for the unknown number to represent the problem."	3.OA.3	Teaching Notes	5
"Fluently multiply and divide within 100." "Know from	3.OA.7	Additional array and multiplication cards added to activities	5,8
memory all products of two one-digit numbers."		Daily Practice/Homework	5
			6,7,8
Round whole numbers to the nearest 10 or 100.	3.NBT.1	1 activity	3
		Ten-Minute Math: Practicing Place Value	4, 6, 7, 9
Multiply one-digit numbers by multiples of 10 up to 90.	3.NBT.3	1 Session	5
		Daily Practice/Homework	5, 6, 8
Represent fractions, including equivalent fractions, on a	3.NF.2a-b	2 Sessions	7
number line. Use $<, >, =$ to notate the comparison of fractions.	3.NF.3a-d	Teaching Notes	7
Express whole numbers as fractions, and vice versa.		Daily Practice/Homework	7
Measure, estimate, and solve problems about liquid volumes	3.MD.2	3 Sessions	9
and masses of objects in grams, kilograms, and liters.		Daily Practice/Homework	9

Additional Content That Extends the Mathematics in Investigations Grade 3

¹ All the necessary information and materials are included in *Investigations and the Common Core State Standards*. For more information, see: http://assets.pearsonschool.com/asset mgr/current/20119/InvestigationsCCBrochure.pdf.

² These ideas, which paraphrase the CCSS Standards, may reflect only a portion of one standard, or several standards combined.

Math Idea(s) ²	CCSS	Additional Content	Unit
	Standard		
"Draw a scaled picture graph."	3.MD.3	1 Session	2
		Daily Practice/Homework	2
Relate area to addition and multiplication and use area models	3.MD.7 a-d	2 Sessions	5
to represent the distributive property. Recognize area as		Math/Teaching Notes	4,5
additive.		Daily Practice/Homework	5,8
Exhibit "rectangles with the same perimeter and different areas	3.MD.8	1 Session	4
or with the same area and different perimeters."		Math/Teaching Notes	4
		Daily Practice/Homework	4

Pacing in Grade 3. Most of the CCSS content standards are met by teaching the third grade units, in order, as written. *Investigations and the Common Core State Standards at Grade 3* also includes 10 new Sessions which are incorporated into the nine original units. In order to keep the total number of Sessions manageable, omit the 11 Sessions listed in the table below. While they do not focus explicitly on CCSS content, they broaden the mathematics experience for third graders and can be taught if time permits.

Unit	Original #	New Sessions	Sessions to be Omitted	Total # of
	of Sessions			Sessions
1	17		1 (addition facts, 2.1)	16
2	20	1 (3.MD.3)	5 (data project, 2.3-2.7)	16
3	26	1 (3.NBT.1)	1 (subtraction facts, 3.1)	26
4	17	1 (3.MD.8)		18
5	23	3 (3.NBT.3, 3.MD.7a-d)		26
6	15			15
7	14	$2(3 \text{ NE } 2_{2} + 3 \text{ NE } 3_{2} + d)$		16
/	14	2 (3.111.2a-0, 3.111.3a-d)		10
8	19			19
9	13	3 (3.MD.2)	5 (geometric solids, 1.1-1.5)	11
	164	11	12	163