New York State Next Generation Mathematics Learning Standards

Grade 4 Crosswalk

Operations and Algebraic Thinking

Cluster	NYS P-12 CCLS	NYS Next Generation Learning Standard
	e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	**NY-4.OA.1** Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations. e.g., • Interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 or 7 times as many as 5. • Represent "Four times as many as eight is thirty-two" as an equation, 4 x 8 = 32.
	4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. **4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity.	**NY-4.OA.2** Multiply or divide to solve word problems involving multiplicative comparison, distinguishing multiplicative comparison from additive comparison. Use drawings and equations with a symbol for the unknown number to represent the problem.

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Operations and Algebraic Thinking		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Gain familiarity with factors and multiples.	**4.OA.4** Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.	**NY-4.OA.4** Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors.

Cluster	NYS P-12 CCLS	NYS Next Generation Learning Standard
Generalize place value understanding for multi-digit whole numbers.	**4.NBT.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.* Note: Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.	**NY-4.NBT.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. e.g., Recognize that **70 × 10 = 700 (and, therefore, 700 ÷ 10 = 70)** by applying concepts of place value, **multiplication**, and division. Note: Grade 4 expectations are limited to whole numbers less than or equal to 1,000,000.
	4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. Note: Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.	**NY-4.NBT.2a**. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. e.g., 50,327 = 50,000 + 300 + 20 + 7 **NY-4.NBT.2b** Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. Note: Grade 4 expectations are limited to whole numbers less than or equal to 1,000,000.

4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.

Note: Grade 4 expectations in this domain are limitereiteu48 163.30p14(l)2.9(t)15(e)17.1(6(ed)-8 Tm ( )Tj-5.1(ad7-5.1)]TJ 0 TcEMC TcT /P <a)]TJ 0.05(te)8107 Tw 8.04 -0 0 8.0∢

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Number and Operations in Base Ten		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Use place value understanding and properties of operations to perform multi-digit arithmetic.	**4.NBT.4** Fluently add and subtract multi-digit whole numbers using ~~the~~ standard algorithm. Note: Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.	**NY-4.NBT.4**

NYSED Grade 4 Draft

New York State Next Generation Mathematics Learning Standards
Grade 4 Crosswalk
Number and Operations - Fractions

Cluster	**NYS P6481 0.4946Gv68w459.6TTm [(NYS ET12EM96 11PTmx/MCODD1ZET>RDG 6G.8442718Ac6500Pag74af6**

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Number and Operations - Fractions		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	**4.NF.3** Understand a fraction *a/b* with a > 1 as a sum of fractions 1/*b*. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions,	

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Number and Operations - Fractions		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Understand decimal notation for fractions, and compare decimal fractions.	**4.NF.5** Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.* Students who c	

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Measurement and Data		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	**4.MD.1**	

New York State Next Generation Mathematics Learning Standards		
Grade 4 Crosswalk		
Geometry		
Cluster	**NYS P-12 CCLS**	**NYS Next Generation Learning Standard**
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	**4.G.1** Draw points, lines, line segments, rays, angles (right, acute,	