

	A	B	C
1	VA 2009	Mathematics Standards of Learning for Grade 4	Making Sense of Problem Solving
2			WU = Warm Up, PST = Problem Solving Task, DAPSE = Section 1: Developing a Problem Solving
3	Number and Number Sense	Focus: Place Value, Fractions, and Decimals	Level E is Grade 4
4	4.1	The student will:	
5	4.1a	identify orally and in writing the place value for each digit in a whole number expressed through millions;	
6	4.1b	compare two whole numbers expressed through millions, using symbols (>, <, or =); and	
7	4.1c	round whole numbers expressed through millions to the nearest thousand, ten thousand, and hundred thousand.	
8	4.2	The student will:	
9	4.2a	compare and order fractions and mixed numbers;	E.5 PST
10	4.2b	represent equivalent fractions; and	E.6 WU, PST, Extension 1 D.4 Entire Unit
11	4.2c	identify the division statement that represents a fraction.	
12	4.3	The student will:	
13	4.3a	read, write, represent, and identify decimals expressed through thousandths;	F-DAPSE-A, Lesson 3
14	4.3b	round decimals to the nearest whole number, tenth, and hundredth;	
15	4.3c	compare and order decimals; and	E.4 PST
16	4.3d	given a model, write the decimal and fraction equivalents.	E.4 entire unit E.5 entire unit E.6 entire unit
17	Computation & Estimation	Focus: Factors and Multiples, and Fraction and Decimal Operations	
18	4.4	The student will:	
19	4.4a	estimate sums, differences, products, and quotients of whole numbers;	
20	4.4b	add, subtract, and multiply whole numbers;	F-DAPSE-B, Lesson 2 E.1 Entire Unit
21	4.4c	divide whole numbers, finding quotients with and without remainders;	

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22	4.4d	solve single-step and multistep addition, subtraction, and multiplication problems with whole numbers.	E-DAPSE - A, Lesson 2 F-DAPSE-B, Lesson 3 E.1 Entire Unit
23	4.5	The student will:	
24	4.5a	determine common multiples and factors, including least common multiple and greatest common factor;	
25	4.5b	add and subtract fractions having like and unlike denominators that are limited to 2, 3, 4, 5, 6, 8, 10, and 12, and simplify the resulting fractions, using common multiples and factors;	F-DAPSE-B, Lesson 1
26	4.5c	add and subtract with decimals; and	
27	4.5d	solve single-step and multistep practical problems involving addition and subtraction with fractions and with decimals.	E.4 Extension F-DAPSE-B, Lesson 4
28	Measurement	Focus: Equivalence within U.S. Customary and Metric Systems	
29	4.6	The student will:	
30	4.6a	estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate; and	
31	4.6b	identify equivalent measurements between units within the U.S. Customary system (ounces, pounds, and tons) and between units within the metric system (grams and kilograms).	
32	4.7	The student will:	
33	4.7a	estimate and measure length, and describe the result in both metric and U.S. Customary units; and	E.5 Extension
34	4.7b	identify equivalent measurements between units within the U.S. Customary system (inches and feet; feet and yards; inches and yards; yards and miles) and between units within the metric system (millimeters and centimeters; centimeters and meters; and millimeters and meters).	
35	4.8	The student will:	
36	4.8a	estimate and measure liquid volume and describe the results in U.S. Customary units; and	F. 12 WU1, 2
37	4.8b	identify equivalent measurements between units within the U.S. Customary system (cups, pints, quarts, and gallons).	

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38	4.9	The student will determine elapsed time in hours and minutes within a 12-hour period.	
39	Geometry	Focus: Representations and Polygons	
40	4.10	The student will:	
41	4.10a	identify and describe representations of points, lines, line segments, rays, and angles, including endpoints and vertices; and	E.14 WU
42	4.10b	identify representations of lines that illustrate intersection, parallelism, and perpendicularity.	
43	4.11	The student will:	
44	4.11a	investigate congruence of plane figures after geometric transformations, such as reflection, translation, and rotation, using mirrors, paper folding, and tracing; and	D.9 entire unit
45	4.11b	recognize the images of figures resulting from geometric transformations, such as translation, reflection, and rotation.	E.12 entire unit E.13 entire unit
46	4.12	The student will:	
47	4.12a	define polygon;	
48	4.12b	identify polygons with 10 or fewer sides.	
49	Probability & Statistics	Focus: Outcomes and Data	
50	4.13	The student will:	
51	4.13a	predict the likelihood of an outcome of a simple event;	E-DAPSE-B, Lesson 3
52	4.13b	represent probability as a number between 0 and 1, inclusive.	
53	4.14	The student will collect, organize, display, and interpret data from a variety of graphs.	E.15 entire unit
54	Patterns, Functions, and Algebra	Focus: Geometric Patterns, Equality, and Properties	
55	4.15	The student will recognize, create, and extend numerical and geometric patterns.	E-DAPSE - A, Lesson 1 E-DAPSE-B, Lesson 2 E.3 entire unit E.11 entire unit
56	4.16	The student will:	

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57	4.16a	recognize and demonstrate the meaning of equality in an equation;	
58	4.16b	investigate and describe the associative property for addition and multiplication.	