CURRICULUM MAP – GRADE 5

CHAPTER 1

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Writes numbers in expanded form to thousands place value (5901 = 5000+900+1)	Number Sense	Relationship	D/T
Recognize and name whole numbers to billions	Number Sense	Number Sets	I/D
Write whole numbers through billions	Number Sense	Number Sets	D
Recognize and name whole numbers to millions	Number Sense	Number Sets	D/T
Write whole numbers to millions	Number Sense	Number Sets	D/T

CHAPTER 2

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Read and write decimals to hundredths	Number Sense	Relationship	D/T
Read and write decimals to thousandths & beyond	Number Sense	Relationship	D
Compare and order decimals to nearest hundredth	Number Sense	Relationship	D/T
Compare/ order decimals to nearest thousandth & beyond	Number Sense	Relationship	I/D
Identify equivalent decimals	Number Sense	Relationship	D

CHAPTER 3

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Use logical reasoning (inductive & deductive)	Patterns & Functions	Logic	I

CHAPTER 4

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Round decimals to the nearest tenth and hundredth	Number Sense	Estimation	D
Uses benchmark decimals in problem solving	Number Sense	Estimation	D/T

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CHAPTER 5

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Use variables to represent a missing value	Patterns & Functions	Relationship	D

CHAPTER 6

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Write and evaluate powers (exponents – positive)	Patterns & Functions	Relationship	I
Describe a rule that explains a functional relationship and/or pattern using addition, subtraction or multiplication rules or regressions (function boxes)	Patterns & Functions	Number	D/T

CHAPTER 7

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Describe and compare collected data	Statistics	Data Interpretation	D
Analyze data to derive meaning	Statistics	Data Interpretation	D
Determine central tendency (mean, median, mode and range) in basic problems	Statistics	Data Interpretation	D/T
Determine measures of central tendency (mean, median, mode and range) in complex problems	Statistics	Data Interpretation	I
Utilize graphs or diagrams to display data, utilizing technology as appropriate (line plots and Venn Diagrams)	Probability	Data Organization	D/T

CHAPTER 8

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Identify & locate objects using the rectangular coordinate system (one quadrant grids using numbers only)	Geometry	Geometry	D
Design various methods to gather data	Probability	Data Collection	I

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CHAPTER 9

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Use estimation in problem solving	Number Sense	Estimation	D
Multiply whole numbers 2 digit x 2 digit	Number Sense	Computation	D/T
Multiply whole numbers 2 digit x 2 digit	Number Sense	Computation	I/D

CHAPTER 10

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Multiply decimals	Number Sense	Computation	I/D
Uses benchmark decimals in problem solving	Number Sense	Estimation	D/T

CHAPTER 11

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Divide whole numbers 3 digit x 1 digit	Number Sense	Computation	D/T

CHAPTER 12

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Divide whole numbers 2 digit x 2 digit	Number Sense	Computation	D/T
Divide whole numbers 3 digit x 2 digit & beyond	Number Sense	Computation	I/D

CHAPTER 13

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Divide decimals	Number Sense	Computation	I
Uses benchmark decimals in problem solving	Number Sense	Estimation	D/T

CHAPTER 14 --NONE

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CHAPTER 15

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Recognize exponents	Number Sense	Number Sets	I/D
Express a number in its prime factorization form	Number Sense	Number Theory	D
Identify greatest common factor (through 50)	Number Sense	Number Theory	D/T
Identify greatest common factor (greater than 50)	Number Sense	Number Theory	I
Identify multiples	Number Sense	Number Theory	D/T
Identify least common multiple (through 24)	Number Sense	Number Theory	D/T
Identify least common multiple (greater than 24)	Number Sense	Number Theory	I
Identify prime and composite	Number Sense	Number Theory	D
Test for divisibility (2, 3, 4, 5, 6, 9, 10)	Number Sense	Number Theory	D/T
Determine absolute value of an integer	Number Sense	Number Theory	I/D
Write and evaluate powers (exponents – positive)	Number Sense	Computation without calculator	I/D

CHAPTER 16

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Write numbers in scientific notation	Number Sense	Number Sets	I
Writes numbers in expanded form to the thousands place value (5901 = 5000+900+1)	Number Sense	Relationship	D/T
Simplify and order fractions (to sixteenths) including mixed fractions	Number Sense	Relationship	D/T
Identify equivalent fractions (to sixteenths) including mixed fractions	Number Sense	Relationship	D/T
Reduce fractions to lowest/simplest term	Number Sense	Relationship	D/T
Use proper and improper fractions	Number Sense	Relationship	D/T
Relate and convert fractions to decimals	Number Sense	Relationship	D
Uses benchmark fractions in problem solving	Number Sense	Estimation	D/T
Recognize equivalence between fractions, percents and decimals with visuals using parts of a whole and parts of a set	Number Sense	Relationship	D/T

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CHAPTER 17

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Add / subtract fractions with unlike denominators	Number Sense	Computation	D/T
Uses benchmark fractions in problem solving	Number Sense	Estimation	D/T

CHAPTER 18

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Add / subtract mixed numbers	Number Sense	Computation	D

CHAPTER 19

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Multiply fractions	Number Sense	Computation	I

CHAPTER 20

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Use and determine reciprocals	Number Sense	Relationship	I

CHAPTER 21

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Recognize, name and compare integers	Number Sense	Relationship	D
Add / subtract integers	Number Sense	Computation	I

CHAPTER 22

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Identify the fourth coordinate pair when given three vertices of a quadrilateral on a coordinate grid (including negative coordinates)	Geometry	Geometry	D/T

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CHAPTER 23

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Recognize and name: special quadrilaterals and other polygons	Geometry	Geometry	D
Identify and label points, lines, and line segments	Geometry	Geometry	D/T
Identify and label rays and angles	Geometry	Geometry	D/T
Identify similar shapes	Geometry	Geometry	D
Identify and calculate radius and diameter	Measurement	Types	D
Classify angles	Measurement	Angles	D/T
Measure angles to nearest degree	Measurement	Angles	D
Classify angle pairs	Measurement	Angles	I
Identify and name regular polygons with 3, 4, 5, 6 or 8 sides	Geometry	Geometry	D/T
Identify, figure, draw and construct parallel, intersecting and perpendicular lines	Geometry	Geometry	D

CHAPTER 24

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Create generalizations	Patterns & Functions	Logic	D
Classify triangles according to sides and/or angles (acute, obtuse & right)	Geometry	Geometry	D/T
Classify quadrilaterals according to sides and/or angles	Geometry	Geometry	D
Develop spatial sense 2D, 3D including drawing and constructing models	Geometry	Geometry	D

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CHAPTER 25

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Recognize customary units of measurement (length, capacity, weight)	Measurement	Systems	D/T
Recognize metric units of measurement	Measurement	Systems	D
Make reasonable estimates of measurement	Measurement	Estimation	D/T
Convert customary / metric measurement (inches to feet, quarts to cups, mm to cm, etc)	Measurement	Types	D/T
Determine elapsed time using a clock	Measurement	Time	D/T
Use customary units to make linear measurements to the 1/16 inch	Measurement	Types	D/T

CHAPTER 26

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Determine the circumference of a circle	Measurement	Types	I
Use formula to find perimeter of common & complex figures	Measurement	Types	I/D
Determine area (square, rectangle and right triangle) – metric & customary	Measurement	Types	D/T

CHAPTER 27

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Develop spatial sense: 2-D, 3-D (incl. draw / construct models)	Geometry	Geometry	D
Measure / determine volume of rectangular prisms	Measurement	Types	D
Identify, describe and compare shapes from nets /flat patterns (cubes, rectangular and triangular prisms, rectangular and triangular pyramids)	Geometry	Geometry	D/T

CHAPTER 28

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Understand basic concept of ratio and proportion (scale map and proportional context)	Number Sense	Relationship	D/T
Determine distance between two points using a scale	Number Sense	Relationship	D/T
Use ratio and proportion (rates, scale drawings & similarity)	Number Sense	Relationship	I
Express probability as a ratio	Probability	Numerical Representation	D/T

CHAPTER 29

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Relate and convert decimals to percents	Number Sense	Relationship	I
Recognize the relationship of money to the decimal system	Number Sense	Relationship	D/T

CHAPTER 30

Mathematical skill	Conceptual Framework	Subset	Curriculum Level
Express probability as a ratio, percent, fraction and words	Probability	Numerical Representation	D/T
Determine the number of combinations of three items (tree diagrams)	Probability	Chance	D/T
Use tree diagrams, tables, and systematic listing to count outcomes, choices, and possibilities	Probability	Chance	I/D
Relate/compare experimental probability	Probability	Chance	D