

### Math Lesson Plan 5th Grade Curriculum

Chapter - "Whole Numbers"-Students will use concepts of place value and estimation.		
Lesson Code	Lesson Title and Description	LA Number
1	Whole Numbers without Place Value-Students will use Roman and Greek numerals.	MA5111 MA5112
2	Whole Numbers with Place Value-Students will use place value.	56279 MA5122 MA5123 MA5124 MA5126
3	Estimation-Students will round and estimate whole numbers.	MA5131 MA5132 MA5133 MA5134 MA5135 MA5136
Chapter - "Operations with Whole Numbers"-Students will perform operations using addition, subtraction, multiplication and division of whole numbers.		
Lesson Code	Lesson Title and Description	LA Number
1	Addition and Subtraction-Students will add and subtract whole numbers.	MA5211 MA5212
2	Multiplication-Students will multiply	MA5221

	whole numbers.	MA5222 MA5223 MA5224 MA5226 56282 MA5228 MA52210
3	Exponents-Students will use exponents to solve problem.	56183 MA5232 56280 MA5234 56281 MA5236
4	Division-Students will divide to solve problems.	MA5241 MA5242 56287 MA5244 56285 MA5246 MA5247 MA5248
5	Order of Operations-Students will use order of operations to solve problems.	56184 MA5252
6	Prime Numbers-Students will identify prime & factorization.	56283 MA5262 MA5263 MA5264
7	Problem Solving-Students will solve real-life problems.	MA5271 MA5272
Chapter -"Decimals"-Students will use place value concepts and add, subtract, multiply and divide using decimals.		
Lesson Code	Lesson Title and Description	LA Number
1	Place Value with Decimals-Students will place value of decimals.	MA5311 MA5312 MA5313 MA5314 56294 MA5316 MA5317

		MA5318
2	Adding and Subtracting Decimals- Students will add and subtract decimals.	56295 MA5322 MA5323 MA5324
3	Multiplying and Dividing Decimals- Students will multiply and divide decimals.	56297 MA5332 MA5333 MA5334 MA5335 MA5336
4	Percents-Students will convert decimals to percents.	MA5341 MA5342 MA5343 MA5344
Chapter -"Fractions"-Students will add and subtract using fractions and mixed numbers as well as multiply and divide using fractions.		
Lesson Code	Lesson Title and Description	LA Number
1	Working with Fractions-Students will compare estimate and simplify fractions as well as find equivalent fractions.	MA5411 MA5412 56289 MA5414 MA5415 MA5416 MA5417 MA5418 MA5419 MA54110 MA54111 MA54112
2	Operations-Students will add, subtract, multiply and divide fractions.	MA5421 MA5422 MA5423 MA5424 MA5425 MA5426 MA5427 MA5428 MA5429 MA54210

		MA54211 MA54212 MA54213 MA54214
3	Relationships-Students will use fractions, decimals and percents.	56292 MA5432 MA5433 MA5434
4	Ratios-Students will learn fractions as ratios.	56298 MA5442 56299 MA5444
Chapter -"Algebra"-Students will learn about integers and variables and how they are used with addition, subtraction, multiplication and division.		
Lesson Code	Lesson Title and Description	LA Number
1	Patterns-Students will identify algebraic patterns.	MA5511 MA5512 MA5513 MA5514
2	Algebraic Expressions-Students will solve problems using algebra.	MA5521 MA5522 MA5523 MA5524 MA5525 MA5526 MA5527 MA5528 MA5529 MA55210 MA52211 MA52212
Chapter -"Measurement"-Students will explore customary and metric units of measurements and perform conversions..		
Lesson Code	Lesson Title and Description	LA Number
1	Customary Measurement-Students will apply formulas to customary measurement	MA5611 MA5612

	problems.	MA5613 MA5614 MA5615 MA5616 MA5617 MA5618
2	Metric Measurement-Students will learn how to solve metric measurement problems.	MA5621 MA5622 MA5623 MA5624 MA5625 MA5626 MA5627 MA5628 MA5629 MA56210
3	Time-Students will solve problems about elapsed time.	56305 MA56322 MA5633 MA5634
4	Calculating Measurements-Students will learn to calculate measurement.	MA5641 MA5642 MA5643 MA5644 MA5645 MA5646 MA5647 MA5648
Chapter -"Geometry"-Students will apply geometric concepts to different situations to solve problems.		
Lesson Code	Lesson Title and Description	LA Number
1	Geometric Terms-Students will explore terms in geometry	56273 MA5712 MA5713 MA5714 56263 MA5716 MA5717 MA5718 56260 MA57110

		56000 MA57112
2	Solid Figures-Three-dimensional figures Solid Figures	MA5721 MA5722 56262 MA5724 56261 MA5726
3	Spatial Reasoning-Students will learn about surface net and scale drawing.	56303 MA5732 56302 MA5734
4	Measuring Angles-Students will find measurement of angles	MA5741 MA5742
5	Coordinate Geometry-Students will learn about ordered pairs.	MA5751 MA5752
6	Transformations and Symmetry-Students will learn about symmetry and transformations.	56275 MA5762 56301 MA5764 56304 MA5766 56274 MA5768
Chapter -"Probability"-Students will apply concept of theoretical probability and use results to make predictions.		
Lesson Code	Lesson Title and Description	LA Number
1	Introduction to Probability-Students will predict using probability.	56266 MA5812 56267 MA5814 MA5815 MA5816
Chapter -"Data Analysis"-Students will different types of graphs and apply measures of central tendency to answer questions.		

Lesson Code	Lesson Title and Description	LA Number
1	Graphs-Students will learn about different kinds of graphs.	MA5911 MA5912 56277 MA5914 56312 MA5916 MA5917 MA5918 MA5919 MA59110 MA59111 MA59112 MA59113 MA59114
2	Statistics-Students will learn about mean, median, mode and range.	MA56314 MA5922 MA5923 MA5924 MA5925 MA5926
"Practice"		
Lesson Code	Lesson Title and Description	LA Number
1	Read and Write Numbers-Use numeric digits and words to read and write numbers up to the hundred billions.	5302 5303 5400 5403
2	Numbers in Expanded Form-Write numbers in expanded form.	5325 5326
3	Roman Numerals-Read and write Roman numerals.	5B004 5B005 5B006 5B007 5B008

4	Round to 10's & 100's-Round to the nearest ten; to the nearest hundred.	5402 5405
5	Exponents-Explore exponents as repeated multiplication.	5B003
6	Greatest Common Factor-Determine the greatest common factor of given numbers.	5329 5330
7	Prime Numbers-Identify prime numbers less than 50.	5333 5334 5B002
8	Prime Factorization-Define and identify prime and composite numbers up to 50. Find the prime factorization of numbers up to 50.	5B015
9	Least Common Multiple-Determine the least common multiple of given numbers.	5331 5332
10	Properties-Describe and apply the Commutative, Associative, and Distributive Properties for multiplication. (Different notations of multiplication.)	5319 5320 56182
11	Mental Computation Strategies-Demonstrate mental computation strategies for multiplication.	5321 5322
12	Estimate Products-Estimate products of whole numbers.	5323 5324 5B017 5B018
13	Four-digit Multiplication-Multiply using four-digit numbers.	5327



14	Skills & Strategies-Analyze and solve problems using multiplication skills and strategies.	5335 5336
15	Opposite Operations-Show multiplication and division as opposite operations.	5394 5395
16	Dividend, Divisor & Quotient-Explain the terms: dividend, divisor, and quotient and what it means for one number to be divisible by another number.	5389 5393
17	Fact Families-Identify fact families for multiplication and division ( $5 \times 6 = 30$ , $30 \div 6 = 5$ , etc.).	5B021
18	Divisibility Rules-Applied the Divisibility Rules of 2, 3, 5, 9, and 10 to various numbers.	5B012 5B013 5B014
19	Properties of Division-Explain rules of division; cannot divide by 0; any number divided by 1 equals that number.	56286
20	Estimate Quotients-Use compatible numbers to estimate quotients.	5B019 5B020
21	Four-digit Dividends-Divide dividends up to four digits by one-digit, two-digit, and three-digit divisors.	5390 5391 5B009 5B010
22	Division Check-Check division by multiplying (and adding remainder).	5328 5351 5352 5B011
23	Grouping With Parentheses-Evaluate expressions with parentheses.	5B001

24	Comparing Fractions-Using the signs $<$ , $>$ , and $=$ , compare fractions with like and unlike denominators.	5355 5356 56288
25	Equivalent Fractions-Find equivalent fractions, and write fractions in simplest form.	5359 5360
26	Identify the Reciprocal-Identify the reciprocal of a given fraction; know that the product of a given number and its reciprocal $= 1$ .	5361 5362
27	Add and Subtract Fractions-Add and subtract fractions (with like and unlike denominators) with and without regrouping, and express answers in simplest form.	5363 5364 56290
28	Comparing and Ordering Mixed Numbers-Compare and order mixed numbers.	5B022
29	Add and Subtract Mixed Numbers-Add and subtract mixed numbers (with like and unlike denominators) with and without regrouping, and express answers in simplest form.	56291 5B023 5B024
30	Multiplying Fractions-Multiply fractions.	5B025 5B027 5B026
31	Multiply Mixed Numbers-Multiply mixed numbers and fractions.	5367 5368 5B028
32	Round Fractions-Round fractions to the nearest whole number.	5369 5370
33	Fractions and Decimals-Write fractions as decimals.	5371 5372

34	Read & Write Decimals-Read, write, and order decimals to the nearest ten-thousandth.	5380 5385
35	Decimals on the Number Line-Read and write decimals on a number line.	56293 5B029
36	Comparing Numbers-Use $<$ , $>$ , $=$ to compare decimals through thousandths. Order decimals through thousands.	5401 5404 5B030
37	Round Decimals-Round decimals to the nearest tenth; to the nearest hundredth; to the nearest thousandth.	5381 5386 5B031 5B032
38	Estimate Decimals-Estimate decimal sums, differences, and products by rounding.	5382 5387
39	Estimate Sums & Differences-Estimate sums and differences for whole numbers and decimals	5304 5406 5B042 5B043
40	Multiply and Divide by 10-Multiply and divide decimals by 10, 100, and 1000. Move the decimal point.	5383 5388 56296 5B016
41	Multiply Decimals by Decimals-Multiply decimals by other decimals.	5B033 5B034 5B035 5B036
42	Divide Decimals-Divide decimals by whole numbers and other decimals.	5384 5B037 5B038 5B039 5B040

43	Word Problems with Decimals - All Operations-Solve word problems with decimals.	5B041
43	Simple Ratios-Determine and express simple ratios.	5453 5454 5B048 5B049
44	Speed as a Ratio-Using the formula $S = D/T$ (or $D = S \times T$ ), solve problems about speed as a ratio.	5459 5460
45	Fractions, Decimals, and %-Recognize the percent sign and understand percent as per hundred. Express equivalences between fractions, decimals, and percentages, and know common equivalencies.	5461 5462 5B046 5B047
46	The Meaning of Percent-An introduction to the concept of percent.	5B044
47	Find a Percent-Find a given percent of a number.	5465
48	Working with Percents-An introduction to percents as part of a whole, includes pie charts and simple additions and subtractions of percents.	5B045
49	Algebraic Expressions-Write algebraic expressions from phrases or word problems and substitute given values for variable to find value of expression.	56315
50	Solve Equations with Add/Sub-Solve one-step algebraic equations using addition or subtraction. ( $x - 5 = 11$ )	56316

51	Solve Equations with Mult/Div-Solve one-step algebraic equations using multiplication or division. ( $5x = 15$ )	56317 56376
52	Point, Line, Segment & Ray-Identify and draw points, segments, rays, and lines.	5413
53	Identify Types of Lines-Identify and draw horizontal, vertical, perpendicular, parallel, and intersecting lines.	5414 5420 5B057 5B058
54	Draw a Circle-Using a compass, draw circles with a given diameter or radius.	5421 5422
55	Angles-Using a protractor, measure the degrees in right, acute, obtuse and straight angles.	5423 5430 5B055 5B056
56	Construct Triangles-Identify and construct with compass and straight edge, equilateral, right, and isosceles triangles.	5424 5431
57	Triangles-Classify triangles as equilateral, right, or isosceles. Apply properties of triangles to find missing side length or angle.	56264
58	Polygons-Sort polygons by attributes. Classify quadrilaterals as parallelograms, trapezoids, rhombi, rectangles and squares.	5301 5305 5425 5426 56260 5B059 5B060
59	Regular Polygons-Know that regular polygons have sides of equal length and angles of equal measure.	56001 56278

60	Interior Angle Sum Theorem-Use triangles and quadrilaterals to draw conclusions about the sum of the interior angle measurements. Identify and draw diagonals of polygons.	56002 56265
61	Circles-Identify arc, chord, radius, and diameters of circles. Calculate the radius or diameter of a circle.	5415 5427 5B061
62	Polyhedrons-Sort polyhedrons by their attributes.	56262 56375
63	Plotting Points-Plot points on a coordinate plane, using ordered pairs of positive and negative whole numbers.	5411 5416
64	Distance Between Lines-Identify the basic characteristics of the coordinate plane. Find the distance between a pair of horizontal or vertical lines on a coordinate grid.	56269
65	Translations-Transform a figure on a coordinate grid. (translation)	56270
66	Distance and Directions-Use fixed and relative directions to find the coordinates of a point.	56271
67	Transformations-Apply multiple transformations to a plane figure. Predict the result. Identify the image of a plane figure as the result of a multiple transformation. (Include 90 degree and 180 degree rotations)	56004
68	Use Ratios to Create Drawings-Use ratio to create a simple scale drawing.	5457

69	Elapsed Time-Solve problems about elapsed time.	5435 5436
70	Linear in Standard English-Estimate and make linear measurements in yards and in feet and inches (to 1/16 in.).	5437 5438
71	Metric System - Linear-Estimate and make linear measurements in meters, centimeters, and millimeters.	56306
72	Weight in Standard English-Estimate and measure weight in pounds and ounces.	5441 5442
73	Weight in Metric Units-Estimate and measure weight in grams and kilograms.	5443 5444
74	Volume in Standard English-Estimate and measure liquid capacity in teaspoons, tablespoons, cups, pints, quarts, gallons.	5445 5446
75	Volume in Metric Units-Estimate and measure liquid capacity in milliliters and liters.	5447 5448
76	Proportional Reasoning-Determine lengths, weights and capacities using proportional reasoning and indirect measurement.	56307
78	Temperature in Degrees-Using Celsius and Fahrenheit scales, measure temperatures.	5449 5450
79	Skills & Strategies-Analyze and solve problems using measurement skills and strategies.	56308

80	Area of Rectangles-Use the formula for the area of a rectangle, and solve problems involving finding area in a variety of square units.	5306 5428 56309 5B062 5B063 5B064
81	Area of Triangles-Using the formula $A = (1/2)(bxh)$ , find the area of triangles.	5307 5429 56310 5B068 5B069 5B070
82	Volume of Rectangular Prisms-Using the formula $V = L \times W \times H$ , compute the volume of rectangular prisms in cubic units.	5309 5433 5B071 5B072 5B073
83	Skills and Strategies-Analyze and solve problems using measurement skills and strategies.	56311
84	Collecting Reliable Data-Identify methods to generate reliable data. (samples, populations, random samples)	56276
85	Data in Graphic Form-Collect and organize data in graphic form.	5409 5410 5417
86	Scatter Plots-Create and interpret scatter plots.	56313
87	Find the Average (mean)-Find the average (mean) of a given set of numbers.	5407 5408
88	Interpret Graphs-Solve problems requiring interpretation and application of graphically displayed data.	5412 5418



89	Compare Probabilities-Compare probabilities of separate events.	56268
90	Probability of Events-Use ratios to find the probability of events.	56036
91	Pertinent & Irrelevant Info-Identify pertinent and irrelevant information when solving problems.	56318
92	Valid and Invalid Arguments-Understand valid and invalid arguments.	56319
93	Deductive and Inductive Reasoning-An introduction to deductive and inductive reasoning.	5B052 5B053
94	Solve Logic Problems-Solve logic problems.	56320
95	Logic Puzzles-Solve logic puzzles.	5B054
96	Basic Problem Solving-An introduction to basic problem solving methods. Learn to use the Guess and Check method. Learn how to solve problems by working backwards.	5B050 5B051