




Grade 4 EDM 2007 to Alaska GLE's

Unit 1					
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
1.1	3rd E&C-3&4		Gr 3 E&C-3	Introducing Student Reference Book Gr 3 N-6; E&C-3 Using Fact Triangles	R: 3 rd F&R-5 Using Relation Symbols E: PS-5
1.2	3rd E&C-3&4	PS-5	G-8	PS-5 Geometry in Our World Care of Math Tools G-8 Review Points, Lines, Line Segments and Rays 3 rd E&C-3 Playing <i>Addition Top-It</i>	R: G-8 Modeling Line Segments E: G-8 Solving a Collinear-Points Puzzle E: G-8 Playing Sprouts
1.3	N-2	3 rd G-1	G-1	G-1 Constructing Angles G-1 Constructing Triangles and Quadrangles E&C-3 Adding and Subtracting 3-digit Whole Numbers	R: G-1 Sorting Pattern Blocks EP: G-1 Characteristics of 2-Dimensional Shapes E: G-1 Solving a Polygon Puzzle
1.4	3 rd E&C-3	3 rd G-1	G-8	3 rd G-1 Properties of Quadrilaterals G-8 Parallel & Intersecting Line Segments G-8 Exploring Parallelograms Gr3 E&C 3&4 Playing <i>Subtraction Top-It</i>	R: G-8 Parallel Line Segments E: 5 th G-1 Solving a Straw-Squares Puzzle E: G-8 Playing Sz'kwa
1.5	3 rd E&C-3	G-1	G-1	G-1 Attributes & Properties of Polygons Convex and Concave Polygons	R: 3 rd G-2 Constructing Polygons R: G-1 Exploring Side Angle Properties E: 5 th G-1 Identifying Properties of Kites & Rhombuses
1.6	N-2		G-1	7 th G-9 Drawing Circles with a Compass; Constructing an Inscribed Square G-1 Playing <i>Polygon Pair-Up</i>	Ex P: 7 th G-9 Creating Circle Designs E: 7 th G-9 An Inscribed Circle Puzzle
1.7	3 rd E&C 3&4	3 rd G-2	7 th G-9	7 th G-9 Circle Constructions G-1 Playing <i>Polygon Pair-Up</i>	E: G-4; 5 th G-4 Drawing Tangent Circles E: G-1; 6 th G-2 Using Diameters, Chords and Radii
1.8	3 rd E&C-3		3 rd E&C-3	7 th G-9 Hexagon and Triangle Constructions G-1 & G-8 Geometric Definitions	R: G-1 Identifying a Regular Hexagon EP 7 th G-9 Inscribing an Equilateral Triangle in a Circle E: 7 th G-9 Inscribing an Equilateral Triangle in a Circle


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Unit 2					
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
2.1	F&R-1	S&P-1	F&R-1	S&P-1 Collecting Data MEA-2 Estimating Temperature/Weight PS-5 Introducing the World Tour Project S&P-2 Using Numerical Information G-1 Playing <i>Polygon Pair-Up</i>	R: F&R 1 & 2 Frames-and-Arrows Problems EP: : F&R 1 & 2 Frames-and-Arrows Problems E: N-1; F&R-1 Finding Missing Numbers
2.2	F&R-1	3 rd N-3		3 rd N-3 Equivalent Names for Numbers & Name Collection Boxes 3 rd N-3 Playing <i>Name That Number</i>	R: 3 rd N-3 Sorting Dominoes by Sums EP: 3 rd N-3 Roman Numerals E: N-1; 3 rd N-3 Pan-Balance Problems
2.3	F&R-3	N-1&2	N-2 & 5 th N-2	N-1&2 Writing Numbers & Identifying Place Value N-3 Writing Numbers in Expanded Notation G-1 Identifying Polygon Properties	EP: N-3 Place Value & Expanded Notation E: N-2 Solving Number Grid Puzzles
2.4	N-1&2	N-1&2	5 th N-2	N-1&2 Reading Numbers & Identifying Place Value N-2 Place Value & Calculator Routines 5 th N-2 Playing <i>Fishing for Digits</i>	R: N-2 Place Value Flip Book E: N-2 Deciphering a Place-Value Code
2.5	E&C-3 3 rd E&C-4	E&C-1	3 rd E&C-3	S&P-1 & E&C-1 Estimating Raisins & Collecting, Organizing & Analyzing Data 3 rd E&C-3 Playing <i>Addition Top-It</i>	R: S&P-1 Data & Tally Marks EP: S&P-3 Landmarks of Data E: S&P-3; PS-5 Making a Prediction Based on a Sample
2.6	3 rd E&C-4	S&P-2	3 rd , 4 th & 5 th S&P-3	S&P-2 Interpreting Data S&P-1 Collecting Data, Organizing, Displaying & Analyzing Data 5 th S&P-3 Finding the Median 3 rd S&P-3 Playing <i>Subtraction Top-It</i>	5 th S&P-3 Finding the Median E: S&P 1&2; 3 rd , 4 th , 5 th , 6 th S&P-3 Comparing Family-Size Data
2.7	F&R-1	E&C-3	E&C-3	E&C-3 Addition of Whole Numbers E&C-1 Estimating Answers N-3 Expanded Notation N-1&2 Playing <i>High Number Toss</i>	R: 3 rd N-6, PS-1 Model Addition Number Stories with Base-10 Blocks E: E&C-3; PS-5 Writing Addition Number Stories
2.8	E&C-3	MEA-5	3 rd , 4 th & 5 th S&P-3	MEA-5 Measuring to the Nearest Cm. S&P-1 Collect, Display, and Analyze Data 5 th S&P-3 Finding the Median	R: 1 st S&P-1 Constructing a "Real Graph" E: S&P-3; PS-4&5 Determining the Validity of "One Size Fits All"


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				G-1 Constructing a Polygon	
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
2.9	E&C-3	E&C-3	E&C-3	E&C-3 Trade-First Subtraction E&C-1 Estimating Answers E&C-3 Partial-Difference Subtraction E&C-3 & N-2 Playing <i>Subtraction Target Practice</i>	R: E&C-3 Counting Up Subtraction E: E&C-1&3 Solving Number-Tile Problems


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Unit 3					
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
3.1	3 rd E&C-4	F&R-1	F&R-1	F&R-1 Function Machines F&R-1&2 What's My Rule? Routines G-1 Polygon Properties	R: F&R-1 What's My Rule? With Models EP: F&R -1&2 What's My Rule? E: G-6 Solving a Perimeter Problem
3.2	N-12	E&C-2	3 rd N-3	E&C-2; N-10&11 Multiplication/Division Fact Triangles E&C-2 Multiplication/Division Fact Table E&C-2 Fact Strategies 3 rd N-3 Playing <i>Name That Number</i>	R: N-6 Making Rectangular Arrays EP: N-12 Playing <i>Buzz and Bizz-Buzz</i> E: N-6&12 Exploring Prime Numbers
3.3	E&C-2	E&C-2	E&C-1	E&C-2 Strategies for the Nine's Table E&C-2 Multiplication Facts Practice Test N-4 Scoring the Practice Test E&C-2 Playing <i>Baseball Multiplication</i>	R:F&R-1 Exploring Skip-Count Patterns EP: F&R-2 Playing <i>Multiplication Top-It</i> E: N-12; S&P-5 Calculating Combinations
3.4	E&C-2	E&C-2	E&C-2	E&C-2 Multiplication Fact Strategies 5 th & 6 th S&P-3 Median and Mean Scores E&C-2 50-Fact Test S&P-1 Graphing Test Results	R: 6 th S&P-3 Finding the Mean E: 5 th & 6 th S&P-3 Comparing the Mean and Median
3.5	F&R-1	E&C-2	N-8	E&C-2 Multiplication & Division Facts N-8 Exploring the Relationship Between Multiplication and Division E&C-2 Playing <i>Beat the Calculator</i>	R: N-8 Playing <i>Division Arrays</i> EP: N-8 Practicing Fact Families E: N-4; 5 th N-6 Exploring the Relationship Between Division & Fractions
3.6	E&C-2	PS-5	E&C-3 5 th E&C-3	PS-5 World Tour E&C-2 Playing <i>Multiplication Top-It</i>	R: PS-5 Exploring Time Zone E: F&R-3; PS-5 Playing Seega
3.7	E&C-2	PS-5	6 th E&C-5	MEA-5 & 6 th E&C-5 Finding Air Distances Between Cities G-1 Playing <i>Polygon Pair-Up</i>	R: MEA-5 Measuring to the Half-Inch EP: 6 th E&C-5 Scale Factors E: PS-5; 6 th E&C-5 Map Scales
3.8	MEA-9	PS-1, 3&5 E&C-1	PS-1, 3&5 5 th E&C-3	PS-1,3, &5 & E&C-1; Solving Number Stories, Estimating Answers 5 th E&C-3 Adding & Subtracting Four Digit Numbers N-1&2 Playing <i>High Number Toss</i>	R:PS-1 & MEA-9 Reviewing Situation Diagrams E: PS-5; E&C-3 Writing Number Stories


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Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
3.9	E&C-2		3 rd F&R-5, E&C-3&4	3 rd F&R-5, E&C-3&4 Meaning of Number Sentences 3 rd F&R-5, E&C-3&4 Practicing With Number Sentences E&C-2; S&P-1 Taking a 50-Fact Test	R: 3 rd F&R-5 Reviewing > & < Symbols E: E&C-2; 3 rd N-3 Solving a Puzzle
3.10	E&C-2	E&C-3&4	E&C-2	3 rd F&R-5; E&C-3&4 Parentheses in Number Sentences 3 rd N-3 Playing <i>Name That Number</i>	EP: E&C-3&4; Parentheses in Number Sentences E: 7 th F&R-5; E&C-2 Writing Number Models With Parentheses
3.11	E&C-3	F&R-4	F&R-4	F&R-4 Meaning of Open Number Sentence F&R-4 Solving Open Number Sentences F&R-3 Calculator & Open Number Sent. 6 th E&C-5 Using a Map Scale	R: F&R-4; E&C-2 Using Fact Triangles to Solve Open Sentences EP: F&R-3 Calculator & Open Number Sentences E: F&R-4 Solving Open Sentences


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Unit 4					
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
4.1	5 th N-2	F&R-3	N-2	F&R-3 Number Sequence on a Calculator N-2 Place Value Chart with Decimals N-2 Decimal Place Value G-1 Playing <i>Polygon Pair-Up</i>	R: MEA-8 Bill & Coin Combinations to Show Decimals EP: N-2 Place Value Flip Book E: N-2 Write & Solve Place Value Puzzles
4.2	N-2	N-2	N-2	N-2 Model Decimals with Base-10 Blocks N-2&4 Relationship Between Fractions & Decimals Using Base-10 Blocks E&C-2 Playing <i>Baseball Multiplication</i>	R: N-2 Playing <i>Base-10 Exchange</i> E: N-4 Exploring the ONE
4.3	6 th N-1	N-2 3 rd F&R-5	3 rd F&R-5	N-2 Model Decimals with Base-10 Blocks 3 rd F&R-5 Compare Decimals With $>$ & $<$ 6 th N-1 Ordering Decimals E&C-2 Playing <i>Product Pile-Up</i>	R: 2 nd M-4 Playing <i>Coin Top-It</i> EP: N-2 Practice With Decimals E: 6 th N-1 Writing Decimal Riddles
4.4	6 th E&C-3	PS-5	5 th E&C-1	PS-5 Decimal Use in Real Life S&P-2 Solving Decimal Problems 5 th E&C-1 Estimating Decimal Sums 6 th N-1 Playing <i>Decimal Number Top-It</i>	R: 5 th E&C-1 Estimating Cost E: PS-1, 3&5; 5 th E&C-1 Solving Gasoline Mileage Problems E: 6 th E&C-3 Solve Decimal Puzzle
4.5	5 th N-8	5 th N-8	5 th N-8	5 th N-8 Modeling Decimal Addition 6 th E&C-3 Adding & Subtracting Decimals 6 th S&P-2 Circle Graphs	R: N-2 Decimal Version of the Number Grid E: 6 th E&C-3 Solving Hiking Trail Problems
4.6	E&C-2	MEA-9	3 rd , 4 th , 5 th , S&P-3	MEA-7&9 Multiple Purchases & Change 5 th E&C-3 Adding & Subtracting Money 3 rd N-3 Playing <i>Name That Number</i>	R: MEA-9 Multiple Purchases & Change E: PS-1, 3&5; 5 th E&C-3 Solving Goodie Bag Problems
4.7	6 th N-1	N-2	6 th N-1	N-2 Model Place Value With Base-10 Blocks N-2 Modeling Decimals With Base-10 Blocks 6 th N-1 Reading & Writing Decimals 3 rd F&R-5 Compare Decimals With $>$ & $<$ 6 th N-1 Ordering Decimals PS-5 World Tour	R: 5 th F&R-1 Decimal Skip Counting Using a Calculator EP: N-2 Playing <i>Decimal Base-10 Exchange</i> E: PS-1, 3&5; 5 th E&C-3 Analyzing Softball Batting Averages
4.8	6 th N-1	MEA-3	MEA-5	MEA-3 Reviewing Metric Units of Linear Measurement MEA-3 & 5 th MEA-3 Equivalent Metric Units	R: MEA-3 Modeling Relationship Between Metric Units of Linear Measurement Using Base-10 Blocks


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				of Length MEA-5 Measuring in Centimeters N-2 Playing <i>Fishing for Digit</i>	E: PS-5; MEA-3 Prefixes in Metrics
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
4.9	E&C-2	MEA-1	N-2	MEA-1 Estimating Length in Centimeters 2 nd MEA-3 Personal Measurement References MEA-1&5 Estimating & Measuring Items Using Metric Units of Measure 6 th N-1 Playing <i>Decimal Number Top-It</i>	R: MEA-4 Matching Metric Units EP: MEA-4 Metric Measurement E: MEA-3&4; PS-5 Designing Measurement Scavenger Hunt
4.10	E&C-2	5 th MEA-3 MEA-5	E&C-2	MEA-5 & 5 th MEA-3 Equivalent Metric Measurement & Measuring Length 6 th MEA-2 & 7 Measuring Invertebrates in Metric Units E&C-2; S&P-1 Taking a 50-Fact Test & Graphing Results	R: 5 th MEA-3 Millimeter Measurements EP: 6 th MEA-7 Measuring to the Nearest Millimeter E: 6 th E&C-5 Investigating Ratios


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Unit 5					
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
5.1	E&C-2	N-6	F&R-1	N-6&7 Modeling Multiplication F&R-1 & 2 Multiplying by Powers of 10 E&C-2 & F&R-1 Playing <i>Beat the Calculator</i> with Powers of 10 2 nd MEA-3 Personal References for Customary Units of Length	R: E&C-2 Playing <i>Multiplication Top-It</i> EP: N-8 Solving Multiplication/Division Puzzles
5.2	E&C-2	E&C-2	3 rd F&R-5 6 th E&C-3	E&C-2 Highest Product Possible N-11 Commutative Property of Multiplication 5 th N-3 & 5 th E&C-4, & 6 th N-10; Playing <i>Multiplication Wrestling</i> S&P-2 Interpreting a Data Table 3 rd , 4 th , & 5 th S&P-3 Landmarks of Data	R: 5 th E&C-3 Reviewing Partial-Sums Addition E: N-3; E&C-2; 6 th N-10 Judging a Multiplication Wrestling Contest
5.3	E&C-1	E&C-1	E&C-1	E&C-1 Estimating Whole Number Addition PS-4&5 Apply Mathematical Skills in Real-World Context; Justify Answer E&C-2 Playing <i>Product Pile-Up</i>	R: E&C-1 Modeling Rounding Numbers With Base-10 Blocks E: E&C-1; PS-5 Solving a Traveling Salesperson Problem
5.4	E&C-2		5 th N-3 5 th E&C-4	E&C-1 Magnitude Estimates E&C-1 Estimating Averages 5 th N-3 & 5 th E&C-4 Playing <i>Multiplication Wrestling</i>	R: E&C-1 Rounding Whole Numbers EP: E&C-1 Estimating Products E: E&C-1&2 Finding Missing Nmbers and Digits
5.5	E&C-2	E&C-4 PS-1	N-3 E&C-2 6 th N-10	E&C-4, PS-1 Multiplication Strategies E&C-4 Finding Products Mentally N-3, E&C-2 Partial Products Algorithm MEA-1 Estimating Lengths	R: N-3, E&C-2, 6 th N-10 Modeling Multiplication With Base-10 Blocks E: E&C-2; PS-5; 6 th E&C-4 Solving an Old Puzzle
5.6	E&C-1	E&C-4	E&C-1	E&C-1 Estimating Products 5 th E&C-4, N-3, E&C-2, 6 th N-10 Partial Products Algorithm to 2-Digit Multipliers 3 rd N-3 Playing <i>Name That Number</i>	R: N-3&7, E&C-2, 6 th N-10 Modeling Multiplication With Base-10 Blocks E: E&C-2; PS-1&3 Scoring a Dart Game
5.7	E&C-2	E&C-2	E&C-2	E&C-2, E&C-4 Reviewing Lattice Multiplication 5 th E&C-4 Lattice with 2-Digit by 2-Digit	R: F&R-2 Exploring Fact Lattice Patterns E: N-6 Investigating Napier's Rods


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				E&C-2 Playing <i>Multiplication Top-It</i>	
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
5.8	N-1	N-2	E&C-1	N-2 Place Value in Large Numbers 5 th N-2 Read and Write Large Numbers E&C-1 Multiplying by Powers of 10 S&P-2 Analyzing a Data Table	R: N-1&2 Playing <i>High Number Toss</i> E: PS-1, 3&5; 6 th E&C-1 Estimating the Number of Dots and the Weight of Paper Needed to Fill the Classroom
5.9	5 th N-1	5 th N-1	F&R-2	5 th N-1 Looking for Large Numbers E&C-1 Introducing Exponential Notation F&R-3 Calculator & Exponential Notation G-1 Playing <i>Polygon Pair-Up</i>	EP: F&R-3 Calculator Explorations & Exponential Notation E: E&C-1; F&R-3 Investigating Powers of 10 on a Calculator
5.10	N-1	PS-5	E&C-2	PS-5 Numbers in Real-Life E&C-1 Reviewing Rounding Numbers PS-1 & E&C-1 Rounding Attendance Figures E&C-2 Taking a 50-Fact Test	R: N-1 Using Number Lines to Find the Halfway Point EP: E&C-1 Rounding Numbers E: E&C-1 Rounding Bar Graph Data
5.11	N-1	S&P-2	5 th N-1 3 rd F&R-5	S&P-2 Numerical Data S&P-2 Comparing Data About Countries PS-5 World Tour	R: N-1 Playing <i>Number Top-It</i> EP: N-1&2 Playing <i>High Number Toss</i>


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Unit 6					
Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
6.1	E&C-2	N-7 E&C-2	PS-3	N-6&7 Modeling Multiplication N-8 Solving Division Number Stories PS-3 Using a Multiplication/Division Diagram F&R-1 Extended Multiplication Facts	R: N-8 Playing <i>Division Arrays</i> E: N-8; PS-1, 3&5 Writing Multiplication/Division Number Stories
6.2	N-7&12	N-7 5 th E&C-4	F&R-4 7 th F&R 5	N-7&8 & 5 th E&C-4 Use Multip./Div. Diagrams to Solve Problems N-12 Use Multiples to Solve Div. Problems N-1&2 Playing <i>High Number Toss</i>	R: N-12 Finding Multiples of a Number EP: N-12 Playing <i>Buzz and Bizz-Buzz</i>
6.3	N-12	N-7 5 th E&C-4	5 th E&C-4	N-7; 5 th E&C-4 Solve Multip/Div. Problem 5 th N-6 Partial Quotients Algorithm 5 th N-2 Place Value in Decimals	R: E&C-2 Playing <i>Beat the Calculator</i> EP: 5 th E&C-4 Playing <i>Division Dash</i> E: E&C-4; MEA-9; PS-1, 3&5 Determining the Cost of Pens
6.4	E&C-2	N-8	6 th E&C-3	5 th N-6 Understanding Division & Remainders PS-4 Interpreting Remainders in Problem Context 5 th E&C-4 Playing <i>Division Dash</i>	R: 3 rd E&C-6 Exploring Remainders E: N-12; PS-1, 3&5; 5 th N-6 Solving a Multiples Number Story
6.5	N-4	N-4	S&P-1	7 th MEA-5 Measuring Angles G-1 Angles of Given Measures S&P 1 Making a Bar Graph	R: 3 rd MEA-7 Alternate Ways of Naming Time EP: N-4 Playing <i>Robot</i> E: G-1; 7 th MEA-5 Measuring Elapsed Time in Degrees
6.6	G-1	G-1	G-1	G-1 Measuring Angles 7 th MEA-5 Using a Full-Circle Protractor G-1 Drawing Angles 5 th E&C-4 Playing <i>Division Dash</i>	R: G-1 Making and Using a Waxed-Paper Protractor EP: G-1; 7 th MEA-5 Playing <i>Angle Tangle</i>
6.7	5 th N-1	G-1	6 th N-2	G-1 Drawing & Measuring Angles G-1 Using a Half-Circle Protractor PS-5 & S&P-2 World Tour	R: G-1 Modeling Angles E: G-1 Exploring Angles in Literature


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Lesson	MM&R	Math Mess		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
6.8	E&C-2	5 th G-8	5 th G-8	5 th G-8 Using Ordered Pairs to Locate Points on a Map 6 th MEA-3 Estimating Distances on a Map G-1 Playing <i>Angle Tangle</i>	R: 5 th G-8 Moving on a Coordinate Grid EP: 5 th G-8 Plotting and Naming Points on a Coordinate Grid E: 5 th G-8 Playing <i>Grid Search</i>
6.9	5 th N-1	G-7	5 th E&C-4 PS-1	G-7 Locating Places on a Globe or Map 5 th G-8 Playing <i>Over and Up Squares</i>	EP: G-7 Locating Places with Latitude and Longitude Cards E: PS-5 Using Time to Determine Longitude
6.10	E&C-2	5 th E&C-4	5 th E&C-4	5 th E&C-4 Solving Division Problems N-12; 5 th N-6 Partial-Quotients Algorithm E&C-2 & S&P-1 Taking a 50-Facts Test	R: 5 th E&C-4 Playing <i>Division Dash</i> E: N-6 Performing a "Magic Trick"


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Unit 7					
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness & Extra Practice)
7.1	N-12	PS-5	N-4	PS-5 Uses for Fractions N-4 Reviewing Fractions and Fractions of a Region E&C-2 <i>Playing Product Pile-Up</i>	R: N-4 Number Line Model for Fractions
7.2	E&C-3	N-4	N-4	N-4 Fractions of a Set World Tour	R: N-4 Exploring Fractions of a Set EP: N-4 <i>Playing Fraction Of</i>
7.3	E&C-3	N-4	S&P-4	N-4 Fractions of a Set S&P-4 Language of Chance Events and Expressing Probability as a Fraction N-4 <i>Playing Fraction Of</i>	R: S&P-4 Probability and Card Deck EP: S&P-4 <i>Playing Grab Bag</i>
7.4	N-4	N-4	N-4	N-4 Fractions of a Set and a Region	N-4 Fractional Parts of a Rectangle
7.5	N-4	N-4	N-9	N-4 Fractions of Pattern Blocks N-9 & E&C-5 Model and Solve Addition & Subtraction of Fractions with Pattern Blocks N-9 & E&C-5 Use a Calculator to Add and Subtract Fractions 7 th MEA-5 <i>Playing Angle Tangle</i>	N-9 & E&C-5 Adding Fractions
7.6	N-9	N-4	7 th MEA-5	N-4 Fractions of a Region N-5 Equivalent Fractions S&P-4 <i>Playing Grab Bag</i>	R: N-5 Finding Equivalent Fractions EP: N-5 <i>Playing Fraction Match</i>
7.7	N-12	N-5	N-5	N-5 Equivalent Names for Fractions N-5 <i>Playing Fraction Match</i>	R: N-5 Equivalent Fractions on a Number Line EP: N-5 Name Collection Boxes EP: N-5 Minute Math
7.8	N-5	6 th N-1	N-4	N-4 Modeling and Renaming Fractions as Decimals Using Base-10 Blocks N-4 Relating Fractions and Division E&C- 2; S&P-1 50 Fact Test	R: Creating Base-10 Block Designs
7.9	N-9	N-4	N-1	N-4 Comparing Fractions N-1 Ordering Fractions 5 th G-8 <i>Playing Over and Up Squares</i>	R: N-4 Sorting Fractions EP: N-4 <i>Playing Fraction Top-It</i>



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Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness & Extra Practice)
7.10	6 th N-1	N-4 & E&C-2	N-4	N-4 & E&C-2 Fractional Parts of a Whole Using Pattern Blocks and Models N-4 Playing <i>Fraction Top-It</i>	
7.11	S&P-4	S&P-4	S&P-4	S&P-4 Design and Solve Problems with Spinners S&P-4 Playing <i>Chances Are</i>	R: N-4 Exploring Fractional Parts of a Region
7.12	6 th N-1	S&P-4	S&P-4	S&P-4 Theoretical and Experimental Probability N-1 Reviewing Place Value	R: 6 th N-1 Renaming Fractions as Percents EP: S&P-4 Probability Review

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Unit 8					
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
8.1	6 th N-1	G-6	6 th N-1	G-6 Perimeter of a Triangle N-5 Playing <i>Fraction Match</i>	R: G-6 Perimeters on a Geoboard EP: G-6 Perimeters E: G-6 Investigating Pattern Block Perimeters
8.2	4 th E&C-2	3 rd MEA-1	S&P-1	3 rd MEA-1 Estimate Length 5 th S&P-3 Find Median estimate G-6 Introducing Scaled Drawing E&C-2 Taking 50-Fact Test S&P-1 Creating a Line Graph	3 rd MEA-1 Measuring to the Foot E: 6 th E&C-5 Making a Scale Drawing of Your Bedroom
8.3	E&C-3	G-6	G-6	G-6 Area of Polygons E&C-1 Estimate Area N-4 Playing <i>Fraction Top-It</i>	R: G-6 Area of Polygons EP: G-6 Area of Polygons E: G-6 Exploring Different Polygons With the Same Areas
8.4	E&C-3	G-6	G-6	G-6 Determine Area on a Grid E&C-1 & G-6 Estimating Area	R: G-6 Counting Squares to Find Area EP: E&C-1 & G-6 Estimating Areas of Irregular Regions
8.5	E&C-2	G-6	G-6	G-6 Area of a Rectangle G-6 Formula for Area of a Rectangle 5 th G-8 Plot and Label Points on a Coordinate Grid	R: G-6 Area of Rectangles E: G-6 Exploring the Relationship Between Perimeter and Area of a Rectangle
8.6	E&C-2	5 th G-1	N-9	6 th G-7 Formula for Area of Parallelograms N-4 Playing <i>Fraction Of</i>	E: G-6 Solving Area and Perimeter Problems
8.7	5 th N-1	G-1	G-6	G-1 Attributes and Properties of Triangles 6 th G-7 Formula for Area of Triangles N-4 Fraction Problems	EP: G-6 Playing <i>Rugs and Fences</i> E: 6 th G-7 Finding the Area and Perimeter of a Hexagon
8.8	E&C-1	G-6	S&P-4	E&C-1 Estimating and Comparing Areas of Countries S&P-4 Playing <i>Grab Bag</i>	R: G-6 Comparing Areas E: PS-5 Calculate Gravitational Pull E: 6 th G-5 Explore Similar Figures


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Unit 9					
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
9.1	6 th N-1	PS-5	N-5	PS-5 Discuss & Apply Knowledge of % N-2 Model Equivalent Names for % 6 th N-1 Fractions, Decimals & Percents N-2 Playing <i>Fraction Match</i>	R: N-2 Equivalent Names for %
9.2	6 th N-1	6 th N-1	6 th N-1	6 th N-1 Equivalent Names for Fractions, Decimals & Percents G-6 Playing <i>Rugs and Fences</i>	R: F&R-1 Exploring Percent Patterns EP: 6 th N-1 Finding Equivalent Names for Fractions E: 6 th N-1 Percent-of Story Problems
9.3	6 th N-1	6 th N-1	6 th N-1	6 th N-1 Using a Calculator to Rename Fractions as Decimals 6 th N-1 Playing <i>Fraction/Percent Concentr.</i>	EP: 6 th N-1 Equivalent & and Decimal Names for Easy Fractions E: 6 th N-1 Finding Decimals Close to "Easy" Fractions
9.4	6 th N-1 & PS-3	6 th N-1	N-4 & N-5	6 th N-1 Using a Calculator to Rename Fractions as Percents PS-1 Solve Number Stories S&P-1 Creating a Bar Graph	N-4 Solving Percent-of and Fraction-of of a set using models EP: 6 th N-1 Practice with % E: PS-1, 3&5; 6 th E&C-4 Solving Discount Number Stories
9.5	6 th N-1	6 th N-1	5 th E&C-4	6 th N-1 Using a Calculator to Rename Fractions as Percents 6 th N-1 Equivalent names for Fractions, Decimals and Percents	R: E&C-1 Rounding Percents EP: 6 th N-1 Converting Fractions, Decimals and Percents
9.6	6 th N-1	6 th N-1	6 th MEA-3	6 th N-1 Renaming Fractions as Percents S&P-1 Tabulating and Analyzing Survey Data E&C-2 & S&P-1 50-Fact Test	R: N-4 Estimating "Fraction-Of" a Collection E: S&P-1 Graphing Survey Results
9.7	N-4	S&P-2	S&P-2	S&P-2 Interpreting Data From a Table S&P-2 Organizing and Displaying Data using a Chart S&P-4 Probability Problems	E: S&P-1&2; PS-5 Displaying and Interpreting Literacy Data
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)

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9.8	E&C-1	6 th E&C-3	5 th E&C-1	6 th E&C-3 Computation with Decimals 5 th G-8 Playing <i>Over and Up Squares</i>	R: E&C-1 & E&C-4 Multiplication of Whole Numbers and Estimating Products R: PS-1 Solve Number Stories with Decimals E: 6 th E&C-4; 6 th N-1 Compare Products
9.9	5 th E&C-4	PS-5	7 th E&C-4	PS-5 & 7 th E&C-4 Decimal Division & Real Life Prob. 5 th E&C-1 Estimating Quotients of Decimals 7 th E&C-4 Decimal Division G-1 Playing <i>Polygon Pair-Up</i>	R: E&C-1 & 6 th E&C-4 Estimating Quotients & Dividing Whole Numbers PS-5 & 6 th E&C-4 Solving Division Number Stories with Money E: 6 th E&C-4 Writing and Solving Division Number Stories with Decimals


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Unit 10					
Lesson	MM&R	Math Message		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)
10.1	N-4 & 6 th N-1	G-3 5 th G-4	5 th G-8	G-3&4; 5 th G-4 Using a Transparent Mirror to draw Congruent Shapes 5 th G-8 <i>Playing Over and Up Squares</i>	R: G-3 Exploring Symmetrical Shapes E: G-3&4; 5 th G-3 Exploring Shadows & Reflections
10.2	6 th N-1		6 th N-1	G-3&4; 5 th G-3 Lines of Reflections G-3 <i>Playing Dart Game, Pocket Billiards</i> G-1; & 7 th MEA-5 <i>Playing Angle Tangle</i>	R: G-3&4; 5 th G-3 Creating a Paint Reflection E: G-3&4; 5 th G-3 Explore Reflections
10.3	5 th N-1	G-3&4 5 th G-3	G-3&4 5 th G-4	G-3&4; 5 th G-4 Congruent Figures G-3&4; 5 th G-3 Line of Reflection & Reflected Images PS-5 World Tour	G-3&4; 5 th G-4 Congruent & Reflected Patterns EP: 5 th G-3 Transformations of Polygons E: G-3&4 Reflections of 3-D Figures
10.4	E&C-3	G-3		G-3 Explore Symmetry & Completing Symmetric Pictures G-3 Finding Lines of Symmetry	EP: G-3 Exploring Line Symmetry E: G-5 Exploring Rotation or Turn Symmetry
10.5	E&C-3	G-4&5	3 rd G-5 G-4 & 5 F&R-1	G-4&5 Congruent Shapes, Transformations (Flips and Turns) 3 rd G-5 Transformations (Slides) of Polygons F&R-1 Continue Symbol Pattern G-1 <i>Playing Polygon Pair-Up</i>	R: F&R-1 Exploring Geometric Patterns EP: G4&5, 3 rd G-5 Creating Frieze Patterns E: G-3, 4&5 Exploring Arrangements of Four Straws E: 5 th G-5 Exploring Tessellations
10.6	6 th N-1	6 th N-1	S&P-4	6 th N-1 Exploring Positive & Negative Numbers 8 th E&C-8 <i>Playing the Credits/Debits Game</i> 6 th N-1 Fractions, Decimals & Percents	R: F&R-1 Exploring Patterns on a Calculator R: 8 th E&C-8 Adding Positive & Negative Numbers

Unit 11					
Lesson	MM&R	Math		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment & Extra Practice)

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		Message			Extra Practice)
11.1	N-5	MEA-4	3 rd G-5	MEA-4 Estimate Weight 5 th MEA-3 & 4 Measuring in Grams & Ounces 5 th MEA-3 Converting Between Grams & Ounces	R: 3 rd MEA-2 Ordering Weights EP: MEA-2 Estimating Weights EP: 5 th MEA-3 Units of Weight
11.2	5 th N-1	G-2	G-2	G-2 Attributes & Properties of Geometric Solids 3 rd MEA-3 Making a 1-Ounce Weight	EP: G-2 Comparing Geometric Solids E: G-2 Exploring Euler's Polyhedral Formula
11.3	N-4	G-2	N-12	G-2 Attributes & Properties of Solid Figures E&C-2, S&P-1 50-Fact Test	R: G-2 Sorting Geometric Solids E: G-2 Creating Net Cubes
11.4	E&C-2	6 th MEA-2	E&C-2	6 th MEA-2 Exploring Volume G-2 Volume of a Rectangular Prism Using Cubes & Grid Paper 8 th E&C-8 Playing the <i>Credits/Debits Game</i>	R: G-2 Finding Volume of Rectangular Prisms E: 6 th G-9 Exploring Penticubes
11.5	3 rd E&C-4	5 th G-6		5 th G-6 Finding Area Given Measurements G-2 Volume of a Rectangular Prism Using Cubes S&P-4 Playing <i>Chances Are</i>	R: 6 th G-4 Spatial-Visualization Puzzles E: 6 th G-9 Estimating the Volume of a Sheet of Paper
11.6	8 th E&C-8	8 th E&C-8	G-5	8 th E&C-8 Adding & Subtracting Positive & Negative Numbers 8 th E&C-8 Playing the <i>Credits/Debits Game</i> 5 th MEA-3 Grams & Ounces	R: 8 th E&C-8 Using a Number Line to Subtract Positive and Negative Numbers EP: 8 th E&C-8 Practice Adding and Subtracting Positive & Negative Numbers
11.7	6 th N-1	5 th MEA-3	MEA-3	5 th MEA-3 Equivalent Measurements MEA-2 Estimate Weight S&P-1 Creating a Bar Graph	R: 3 rd MEA-2 Estimating Capacity EP: 6 th MEA-2 Equivalent Units of Capacity E: 6 th G-9 Modeling the Capacity of Annual Rice Consumption

Unit 12					
Lesson	MM&R	Math		Lesson parts 1 & 2	Lesson part 3 (Readiness, Enrichment &

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		Message			Extra Practice)
12.1	E&C-2	5 th S&P-3	6 th N-1	5 th S&P-3 Finding the Median S&P-1 Collecting Data 8 th E&C-5 Introducing Rate N-4 Fractions & Decimals on Number Line	R: 5 th S&P-5, 6 th S&P-3 Finding Mean and Median of Data E: S&P-1&2; PS-1, 3&5 Creating Side-by-Side Bar Graphs
12.2	8 th E&C-5	8 th E&C-5	F&R-2	8 th E&C-5 Introducing Rate Tables & Solving Rate Problems 8 th E&C-8 Playing the <i>Credits/Debits Game</i>	R: 8 th E&C-5 Illustrating Rate Problems EP: 8 th E&C-5 Solving Rate Problems E: S&P-1&2; F&R-1 Representing Rates with Line Graphs
12.3	8 th E&C-5	8 th E&C-5	S&P-1	8 th E&C-5 Solving a Rate Problem PS-2 Drawing Conclusions About Data S&P-1 Use a Line Graph to Display Data	E: MEA-3; PS-1, 3&5; 5 th E&C-4 Calculating Animal Speeds
12.4	8 th E&C-5	PS-5	3 rd N-3 & 7 th F&R-5	8 th E&C-5 Calculating Unit Price 3 rd N-3 & 7 th F&R-5 Playing <i>Name That Number</i>	R: 8 th E&C-5 Finding Unit Prices E: PS-5 Testing Products with <i>Consumer Reports for Kids Online</i>
12.5	8 th E&C-5	6 th E&C-4	6 th E&C-4	6 th E&C-4 Divide Money Amounts by Whole Numbers using a Calculator 6 th E&C-4 Solving Unit Pricing Problems N-4 Playing <i>Fraction Top-It</i>	R: 6 th E&C-4 Solving Comparison Shopping Problems EP: 8 th E&C-5 Calculating Rates E: PS-5; F&R-1 Measuring Air Pressure With a Barometer
12.6	E&C-2		E&C-2	Completing the World Tour Project E&C-2, S&P-1 Taking a 50-Fact Test	R: 8 th E&C-5 Solving Rate Problems

**GLEs and Games
4th Grade**

(All 4th grade GLEs unless noted otherwise)

Addition Top-It	3rd E&C-3
Subtraction Top-It	3rd E&C-3
Name That Number	3rd N-3
Fishing for Digits	5th N-2
High Number Toss	N1&2
Subtraction Target Practice	E&C-3 & N-2
Buzz and Bizz-Buzz	N-12
Baseball Multiplication	E&C-3
Multiplication Top-It	E&C-2
Beat the Calculator	E&C-2
Beat the Calculator w/ Powers of 10	E&C-2 & F&R-1
Division Arrays	N-8
Seega	F&R-3; PS-5
Base-10 Exchange	N-2
Coin Top-It	2nd N-4
Decimal Top-It	6th N-1
Division Arrays	N-8
Division Dash	5th E&C-4
Robot	N-4
Product Pile-Up	E&C-2
Fraction Of	N-4
Grab Bag	S&P-4
Angle Tangle	G-1 & 7th MEA-5
Dart Game	G-3&4
Pocket Billiards	G-3&4
Fraction Match	N-5
Over and Up Squares	5th G-8
Fraction Top-It	N-4
Chances Are	S&P-4
Rugs and Fences	G-6
Polygon Pair-Up	G-1 & 3rd G-1
Credits/Debits	8th E&C-8

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GLE	MM&R	MM	P 1&2	P 3	TOTAL	Higher Grade Level GLE's
N-1	4	2	7	6	19	67
N-2	5	7	17	12	41	
N-3			4	5	9	
N-4	6	8	19	18	51	
N-5	2	1	4	7	14	
N-6		1	2	4	7	
N-7		1	2	1	4	
N-8		1	3	5	9	
N-9	2		2	1	5	
N-10			1		1	
N-11			2		2	
N-12	5		2	5	12	
M-1		1	3		4	24
M-2			2	2	4	
M-3		1	2	4	7	
M-4		1	1	3	5	
M-5		2	5	1	8	
M-6						
M-7			1		1	

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M-8				1	1	
M-9	1	1	1	3	6	
E&C-1	4	3	13	13	33	75
E&C-2	20	8	30	10	68	
E&C-3	16	3	8	6	33	
E&C-4	3	3	6	3	15	
E&C-5			2		2	
	MM&R	MM	P 1&2	P 3	TOTAL	Higher Grade Level GLE's
F&R-1	4	1	6	11	22	3
F&R-2			2	5	7	
F&R-3	1	1	3	4	9	
F&R-4		1	2	2	5	
G-1	1	4	23	16	38	38
G-2		2	4	5	11	
G-3		3	7	9	19	
G-4		2	6	3	10	
G-5		1	1	3	5	
G-6		5	8	14	29	

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G-7		1	1	1	3	
G-8			4	5	6	
S&P-1		1	19	6	26	18
S&P-2		3	10	3	16	
S&P-3			1	5	6	
S&P-4	1	2	8	7	18	
S&P-5				1	1	
PS-1		2	5	12	19	
PS-2			1		1	
PS-3	2		2		4	
PS-4			2	10	14	
PS-5		9	13	25	47	