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Kentucky Academic Standards for Mathematics (2019)

Grade 5

Module/Lesson	Name	From page	To page	Citations
Module 1: Whole Number Place Value and Multiplication				
Lesson 1.1	Recognize the 10 to 1 Relationship Among Place-Value Positions	5	8	SMP.2; SMP.4; SMP.5; KY.5.NBT.1
Lesson 1.2	Use Powers of 10 and Exponents	9	12	SMP.5; SMP.6; SMP.8; KY.5.NBT.2
Lesson 1.3	Use a Pattern to Multiply by Multiples of 10, 100, and 1,000	13	16	SMP.1; SMP.6; SMP.7; SMP.8; KY.5.NBT.2
Lesson 1.4	Multiply by 1-Digit Numbers	17	20	SMP.2; SMP.3; SMP.6; KY.5.NBT.5
Lesson 1.5	Multiply by Multi-Digit Numbers	21	24	SMP.2; SMP.7; KY.5.NBT.5
Lesson 1.6	Develop Multiplication Fluency	25	28	SMP.2; SMP.3; SMP.4; SMP.6; KY.5.NBT.5
Module 2: Understand Division of Whole Numbers				
Lesson 2.1	Relate Multiplication to Division	33	36	SMP.4; SMP.6; KY.5.NBT.6
Lesson 2.2	Represent Division with 2-Digit Divisors	37	42	SMP.4; SMP.5; KY.5.NBT.6

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Lesson 2.3	Estimate with 2-Digit Divisors	43	46	SMP.1; SMP.3; KY.5.NBT.6
Lesson 2.4	Use Partial Quotients	47	50	SMP.7; SMP.8; KY.5.NBT.6
Module 3: Practice Division of Whole Numbers				
Lesson 3.1	Divide by 2-Digit Divisors	55	58	SMP.7; SMP.8; KY.5.NBT.6
Lesson 3.2	Interpret the Remainder	59	62	SMP.1; SMP.2; SMP.3; SMP.6; KY.5.NBT.6; KY.5.NF.3
Lesson 3.3	Adjust Quotients	63	66	SMP.3; SMP.6; KY.5.NBT.6
Lesson 3.4	Practice with Division	67	70	SMP.4; SMP.6; SMP.7; SMP.8; KY.5.NBT.6
Module 4: Expressions				
Lesson 4.1	Write Numerical Expressions	75	78	SMP.2; SMP.4; KY.5.OA.1; KY.5.OA.2
Lesson 4.2	Interpret Numerical Expressions	79	82	SMP.1; SMP.3; KY.5.OA.2
Lesson 4.3	Evaluate Numerical Expressions	83	86	SMP.4; KY.5.OA.1
Lesson 4.4	Use Grouping Symbols	87	90	SMP.2; SMP.4; KY.5.OA.1
Module 5: Volume				

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Lesson 5.1	Use Unit Cubes to Build Solid Figures	95	98	SMP.2; KY.5.MD.3
Lesson 5.2	Understand Volume	99	102	SMP.6; SMP.7; KY.5.MD.3; KY.5.MD.4
Lesson 5.3	Estimate Volume	103	106	SMP.2; SMP.4; SMP.7; KY.5.MD.4
Lesson 5.4	Find Volume of Right Rectangular Prisms	107	112	SMP.2; SMP.7; KY.5.MD.5
Lesson 5.5	Apply Volume Formulas	113	116	SMP.1; SMP.2; SMP.6; KY.5.MD.5
Lesson 5.6	Find Volume of Composed Figures	117	122	SMP.2; SMP.4; SMP.5; SMP.7; SMP.8; KY.5.MD.5
Module 6: Understand Addition and Subtraction of Fractions with Unlike Denominators				
Lesson 6.1	Represent Fraction Sums and Differences	129	132	SMP.2; SMP.4; SMP.5; KY.5.NF.2
Lesson 6.2	Represent Addition with Different-Sized Parts	133	136	SMP.5; SMP.6; SMP.7; KY.5.NF.2
Lesson 6.3	Represent Subtraction with Different-Sized Parts	137	140	SMP.5; SMP.6; SMP.7; KY.5.NF.2
Lesson 6.4	Rewrite Fractions with a Common Denominator	141	144	SMP.1; SMP.2; KY.5.NF.1

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Module 7: Add and Subtract Fractions and Mixed Numbers with Unlike Denominators				
Lesson 7.1	Use Benchmarks and Number Sense to Estimate	149	152	SMP.5; KY.5.NF.2
Lesson 7.2	Assess Reasonableness of Fraction Sums and Differences	153	156	SMP.3; SMP.6; SMP.7; KY.5.NF.1
Lesson 7.3	Assess Reasonableness of Mixed Number Sums and Differences	157	160	SMP.4; SMP.6; KY.5.NF.1; KY.5.NF.2
Lesson 7.4	Rename Mixed Numbers to Subtract	161	166	SMP.2; SMP.3; SMP.4; SMP.5; KY.5.NF.1
Lesson 7.5	Apply Properties of Addition	167	170	SMP.1; SMP.2; SMP.4; SMP.6; SMP.7; KY.5.NF.1
Lesson 7.6	Practice Addition and Subtraction Using Equations	171	174	SMP.2; SMP.4; SMP.7; SMP.8; KY.5.NF.1; KY.5.NF.2
Module 8: Understand Multiplication of Fractions				
Lesson 8.1	Explore Groups of Equal Shares to Show Multiplication	181	184	SMP.1; SMP.2; SMP.5; SMP.7; SMP.8; KY.5.NF.4
Lesson 8.2	Represent Multiplication of Whole Numbers by Fractions	185	190	SMP.1; SMP.5; SMP.6; SMP.7; KY.5.NF.4
Lesson 8.3	Represent Multiplication with Unit Fractions	191	194	SMP.1; SMP.2; SMP.5; KY.5.NF.4
Lesson 8.4	Represent Multiplication of Fractions	195	198	SMP.2; SMP.4; KY.5.NF.4; KY.5.NF.6

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Lesson 8.5	Use Representations of Area to Develop Procedures	199	204	SMP.1; SMP.5; SMP.6; SMP.7; KY.5.NF.4
Lesson 8.6	Interpret Fraction Multiplication as Scaling	205	208	SMP.1; SMP.3; KY.5.NF.5
Lesson 8.7	Multiply Fractions	209	212	SMP.2; SMP.3; SMP.4; SMP.7; KY.5.NF.4
Module 9: Understand and Apply Multiplication of Mixed Numbers				
Lesson 9.1	Explore Area and Mixed Numbers	217	220	SMP.5; KY.5.NF.4; KY.5.NF.6
Lesson 9.2	Multiply Mixed Numbers	221	224	SMP.1; SMP.4; SMP.6; SMP.7; KY.5.NF.6
Lesson 9.3	Practice Multiplication with Fractions and Mixed Numbers	225	228	SMP.1; SMP.2; SMP.4; SMP.6; SMP.7; SMP.8; KY.5.NF.4; KY.5.NF.6
Lesson 9.4	Apply Fraction Multiplication to Find Area	229	232	SMP.1; SMP.4; SMP.6; KY.5.NF.4; KY.5.NF.6
Module 10: Understand Division with Whole Numbers and Unit Fractions				
Lesson 10.1	Interpret a Fraction as Division	239	242	SMP.2; SMP.4; KY.5.NF.3
Lesson 10.2	Represent and Find the Size of Equal Parts	243	246	SMP.5; SMP.7; KY.5.NF.7
Lesson 10.3	Use Representations of Division of Unit Fractions by Whole Numbers	247	252	SMP.4; SMP.5; SMP.6; KY.5.NF.7

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Lesson 10.4	Represent and Find the Number of Equal-Sized Parts	253	256	SMP.1; SMP.4; KY.5.NF.7
Lesson 10.5	Use Representations of Division of Whole Numbers by Unit Fractions	257	262	SMP.2; SMP.3; SMP.4; SMP.5; SMP.6; SMP.7; SMP.8; KY.5.NF.7
Module 11: Divide with Whole Numbers and Unit Fractions				
Lesson 11.1	Relate Multiplication and Division of Fractions	267	270	SMP.2; SMP.3; SMP.5; KY.5.NF.7
Lesson 11.2	Divide Whole Numbers by Unit Fractions	271	274	SMP.3; SMP.4; SMP.5; KY.5.NF.7
Lesson 11.3	Interpret and Solve Division of a Whole Number by a Unit Fraction	275	278	SMP.2; SMP.4; SMP.5; SMP.6; KY.5.NF.7
Lesson 11.4	Divide Unit Fractions by Whole Numbers	279	282	SMP.2; SMP.4; SMP.5; SMP.6; SMP.7; KY.5.NF.7
Lesson 11.5	Interpret and Solve Division of a Unit Fraction by a Whole Number	283	286	SMP.2; SMP.4; SMP.5; SMP.6; KY.5.NF.7
Lesson 11.6	Solve Division Problems Using Visual Models and Equations	287	290	SMP.1; SMP.3; SMP.4; SMP.5; KY.5.NF.7
Module 12: Customary Measurement				
Lesson 12.1	Convert Customary Measurements	295	300	SMP.2; SMP.3; KY.5.MD.1
Lesson 12.2	Solve Multistep Customary Measurement Problems	301	304	SMP.1; SMP.2; KY.5.MD.1

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Lesson 12.3	Represent and Interpret Measurement Data in Line Plots	305	308	SMP.2; KY.5.MD.2
Lesson 12.4	Convert Time and Find Elapsed Time	309	312	SMP.1; SMP.2; SMP.5; KY.5.MD.1
Module 13: Decimal Place Value				
Lesson 13.1	Understand Thousandths	319	322	SMP.2; SMP.5; SMP.6; SMP.7; KY.5.NBT.1
Lesson 13.2	Read and Write Decimals to Thousandths	323	326	SMP.2; SMP.7; KY.5.NBT.3
Lesson 13.3	Round Decimals	327	330	SMP.2; SMP.6; SMP.7; SMP.8; KY.5.NBT.4
Lesson 13.4	Compare and Order Decimals	331	334	SMP.1; SMP.2; SMP.6; KY.5.NBT.3
Module 14: Add and Subtract Decimals				
Lesson 14.1	Represent Decimal Addition	339	342	SMP.5; SMP.6; KY.5.NBT.7
Lesson 14.2	Represent Decimal Subtraction	343	346	SMP.3; SMP.5; KY.5.NBT.7
Lesson 14.3	Assess Reasonableness of Sums and Differences	347	350	SMP.3; SMP.5; KY.5.NBT.7
Lesson 14.4	Add Decimals	351	354	SMP.2; SMP.4; SMP.5; SMP.6; KY.5.NBT.7

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Lesson 14.5	Subtract Decimals	355	358	SMP.3; SMP.6; KY.5.NBT.7
Lesson 14.6	Use Strategies and Reasoning to Add and Subtract	359	362	SMP.1; SMP.2; SMP.3; SMP.6; SMP.7; KY.5.NBT.7
Module 15: Multiply Decimals and Whole Numbers				
Lesson 15.1	Understand Decimal Multiplication Patterns	369	374	SMP.6; KY.5.NBT.2; KY.5.NBT.7
Lesson 15.2	Represent Multiplication with Decimals and Whole Numbers	375	378	SMP.4; KY.5.NBT.7
Lesson 15.3	Assess Reasonableness of Products	379	382	SMP.2; SMP.7; SMP.8; KY.5.NBT.7
Lesson 15.4	Multiply Decimals by 1-Digit Whole Numbers	383	388	SMP.2; SMP.4; SMP.5; SMP.6; KY.5.NBT.7
Lesson 15.5	Multiply Decimals by 2-Digit Whole Numbers	389	392	SMP.3; SMP.7; KY.5.NBT.7
Lesson 15.6	Solve Problems Using Bar Models	393	396	SMP.1; KY.5.NBT.7
Module 16: Multiply Decimals				
Lesson 16.1	Represent Decimal Multiplication	401	404	SMP.4; KY.5.NBT.7
Lesson 16.2	Multiply Decimals	405	408	KY.5.NBT.7

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Lesson 16.3	Multiply Decimals with Zeros in the Product	409	412	SMP.1; SMP.2; SMP.3; SMP.6; SMP.7; SMP.8; KY.5.NBT.7
Module 17: Divide Decimals				
Lesson 17.1	Understand Decimal Division Patterns	419	424	SMP.6; SMP.8; KY.5.NBT.2
Lesson 17.2	Represent Division of Decimals by Whole Numbers	425	428	SMP.5; KY.5.NBT.7
Lesson 17.3	Assess Reasonableness of Quotients	429	432	SMP.4; KY.5.NBT.7
Lesson 17.4	Divide Decimals by Whole Numbers	433	436	SMP.1; SMP.6; KY.5.NBT.7
Lesson 17.5	Represent Decimal Division	437	442	SMP.5; KY.5.NBT.7
Lesson 17.6	Divide Decimals	443	446	SMP.4; SMP.6; KY.5.NBT.7
Lesson 17.7	Write Zeros in the Dividend	447	450	SMP.3; SMP.4; SMP.5; SMP.6; KY.5.NBT.7
Module 18: Customary and Metric Measurement				
Lesson 18.1	Understand Metric Conversions	455	458	SMP.2; SMP.4; SMP.6; SMP.7; SMP.8; KY.5.MD.1
Lesson 18.2	Solve Customary and Metric Conversion Problems	459	462	SMP.1; SMP.2; SMP.6; KY.5.MD.1

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Lesson 18.3	Solve Multistep Measurement Problems	463	466	SMP.1; SMP.2; SMP.4; SMP.6; SMP.7; KY.5.MD.1
Module 19: Graph and Patterns				
Lesson 19.1	Describe a Coordinate System	473	476	SMP.5; KY.5.G.1
Lesson 19.2	Understand Ordered Pairs	477	480	SMP.2; SMP.6; KY.5.G.2
Lesson 19.3	Use Ordered Pairs to Represent Problems	481	484	SMP.1; SMP.2; KY.5.G.2
Lesson 19.4	Generate and Identify Numerical Patterns	485	488	SMP.2; KY.5.OA.3
Lesson 19.5	Identify and Graph Relationships and Patterns	489	492	SMP.7; KY.5.OA.3
Module 20: Classify Two-Dimensional Figures				
Lesson 20.1	Identify and Classify Polygons	497	500	SMP.5; SMP.6; SMP.7; KY.5.G.3; KY.5.G.4
Lesson 20.2	Classify and Organize Triangles	501	504	SMP.3; SMP.6; SMP.7; SMP.8; KY.5.G.3; KY.5.G.4
Lesson 20.3	Classify and Organize Quadrilaterals	505	508	SMP.6; SMP.7; KY.5.G.3; KY.5.G.4
Lesson 20.4	Use Venn Diagrams to Classify Two-Dimensional Figures	509	512	SMP.1; SMP.2; SMP.5; SMP.7; KY.5.G.3; KY.5.G.4