Illustrative Math (IM) Instructional Guide
Grade 4th

Unit 1 *Aug 12 - Aug 23*	**Unit 2** *Aug 26 - Sept 27*	**Unit 3** *Sept 30 - Nov 1*	**Unit 4** *Nov 4 - Jan 10*	**Unit 5** *Jan 13 - Feb 10*	**Unit 6** *Feb 10 - March 27*	**Unit 7** *March 28 - May 1*	**Unit 8** *May 2 - May 15*	**Unit 9** *May 16 - End of Year*
Factors and Multiples	**Fraction Equivalence and Comparison**	**Extending Operations to Fractions**	**From Hundreths to Hundred-thousandths**	**Multiplicative Comparison and Measurement**	**Multiplying and Dividing Multi-digit Numbers**	**Angles and Angle Measurement**	**Properties of Two-Dimensional Shapes**	**Putting it All Together**
10 days	19 days	22 days	25 days	20 days	27 days	18 days	10 days	14 days
	+ 4 flex days	+ 2 flex day	+ 4 flex day		+ 6 flex day	+ 1 flex day		+2 flex days
10 days	**23 days**	**24 days**	**29 days**	**20 days**	**33 days**	**19 days**	**10 days**	**16 days**
Flex Days								

- ☐ If you are behind, catching up so that you can begin the next unit on the suggested date
- ☐ Using a Checkpoint day to understand students' progress towards the unit's goals.
- ☐ Adding a day of Centers to provide students with more practice, target your small group instruction.

iReady BOY	Aug 12- Sept 13 (Sept 20 for EL Students)
iReady MOY	Nov 18 - Dec 15 (Jan 24 with Region Approval, Jan 31 for EL Students)
iReady EOY	May 9 - June 6 (Optional for Grades 3 - 5/6, **except** EL Student)

Reminder: UTK (ETK/TK) are not administered iReady Math Diagnostics

2024-25 Illustrative Math Instructional Guide Unit 1: Grade 4

Students apply understanding of multiplication and area to work with factors and multiples.			
Unit 1 Instructional Window			
Topic Lessons Standards Addressed: 4.OA.B.4		*Aug 12 - Aug 23* *(10 days + 0 flex days = 10 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Understand Factors and Multiples MP6, MP7, MP8	**Goals:** Determine if a number is prime or composite. Explain what it means to be a factor or a multiple of a whole number. Relate the side lengths and area of a rectangle to factors and multiples.	5 days	• Multiples of Nine
Section B: Find Factor Pairs and Multiples MP1, MP2, MP3, MP4, MP6	**Goal:** Apply multiplication fluency within 100 and the relationship between multiplication and division to find factor pairs and multiples.	5 days	

2024-25 Illustrative Math Instructional Guide Unit 2: Grade 4

Students generate and reason about equivalent fractions and compare and order fractions with the following denominators: 2, 3, 4, 5, 6, 8, 10, 12, and 100.

Unit 2 Instructional Window			
Topic Lessons Standards Addressed: 4.NBT.B.4 4.NBT.B.5 4.NF.A.1 4.NF.A.2		*Aug 26 - Sept 27* *(19 days + 4 flex days = 23 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Size and Location of Fractions MP3, MP6, MP7, MP8	**Goals:** Make sense of fractions with denominators 2, 3, 4, 5, 6, 8, 10, and 12 through physical representations and diagrams. Reason about the location of fractions on the number line	7 days + Possible Flex Day(s)	• Who Jumped Farther? • Pasta Party • Fraction Bucket • Fractions in Disguise • Fraction Stand Up • Race to 1
Section B: Equivalent Fractions MP3, MP6, MP7, MP8	**Goals:** Generate equivalent fractions with the following denominators: 2, 3, 4, 5, 6, 8, 10, 12, and 100. Use visual representations to reason about fraction equivalence, including using benchmarks such as ½ and 1.	6 days + Possible Flex Day(s)	
Section C: Fraction Comparison MP1, MP2, MP3, MP4, MP7	**Goals:** Use visual representations or a numerical process to reason about fraction comparison.	6 days + Possible Flex Day(s)	

Students learn that a fraction a/b is a product of a whole number **a** and a unit fraction 1/b, or a/b=a×1/b, and that n×a/b=(n × a)/b. Students learn to add and subtract fractions with like denominators, and to add and subtract tenths and hundredths.

Unit 3 Instructional Window			
Topic Lessons Standards Addressed: 4.NF.A.1 4.NF.A.2 4.NF.B.3 4.NF.B.4 4.NF.C.5 4.MD.B.4		*Sept 30 - Nov 1* *(22 days + 2 flex days = 24 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Equal Groups of Fractions MP2, MP3, MP7, MP8	**Goals:** Recognize that n×a/b=(n × a)/b Represent and explain that a fraction a/b is a multiple of 1/b, namely a×1/b. Represent and solve problems involving multiplication of a fraction by a whole number.	7 days + Possible Flex Day(s)	• Serving Ice Cream • Button Diameters • Birthday Shopping List • Cake Boss • Give'Em Chocolate • Big Feet
Section B: Addition and Subtraction of Fractions MP2, MP3, MP6, MP7, MP8	**Goals:** Create and analyze line plots that display measurement data in fractions of a unit (1/8,1/4,1/2). Represent and solve problems that involve the addition and subtraction of fractions and mixed numbers, including measurements presented in line plots. Use various strategies to add and subtract fractions and mixed numbers with like denominators.	9 days + Possible Flex Day(s)	
Section C: Addition of Tenths and Hundreths	**Goals:** Reason about equivalence to add tenths and hundredths. Reason about	6 days	

MP1, MP2, MP4, MP6, MP7, MP8	equivalence to solve problems involving addition and subtraction of fractions and mixed numbers.	+ Possible Flex Day(s)	

2024-25 Illustrative Math Instructional Guide Unit 4: Grade 4

Students read, write and compare numbers in decimal notation. They also extend place value understanding for multi-digit whole numbers and add and subtract within 1,000,000.

Unit 4 Instructional Window

Topic Lessons Standards Addressed:4.NF.C 4.NF.C.5 4.NF.C.6 4.NF.C.7 4.NBT.A.1 4.NBT.A.2 4.NBT.B.4 4.NBT.A.3		*Nov 4 - Jan 10* *(25 days + 4 flex days = 29 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Decimals with Tenths and Hundredths MP2, MP3, MP6, MP7	**Goals:** Represent, compare, and order decimals to the hundredths by reasoning about their size. Write tenths and hundredths in decimal notation.	6 days + Possible Flex Day(s)	• Karen's Garden • Grade 4: The Amazing Race • Making Punch • Margie Buys Apples
Section B: Place-vaue Relationships through 1,000,000 MP1, MP3, MP6, MP7, MP8	**Goals:** Read, represent, and describe the relative magnitude of multi-digit whole numbers up to 1 million. Recognize that in a multi-digit whole number, the value of a digit in one place represents ten times what it represents in the place to its right.	7 days + Possible Flex Day(s)	
Section C: Compare, Order, and Round MP2, MP3, MP4, MP5, MP6, MP7	**Goals:** Compare, order, and round multi-digit whole numbers within 1,000,000.	6 days + Possible Flex Day(s)	

Section D: Add and Subtract MP2, MP3, MP4, MP6, MP7	**Goals:** Add and subtract multi-digit whole numbers using the standard algorithm..	6 days + Possible Flex Day(s)	

2024-25 Illustrative Math Instructional Guide Unit 5: Grade 4

Students interpret, represent, and solve multiplicative comparison problems using an understanding of the relationship between multiplication and division. They use this thinking to convert units of measure within a given system from larger to smaller units.

Unit 5 Instructional Window

Topic Lessons Standards Addressed: 4.NBT.B.5 4.OA.A.1 4.OA.A.2 4.OA.A.3 4.MD.A.1 4.MD.A.2 4.MD.A.3 4.NBT.B 4.NF.B.4 4.NF.B.4.c	*Jan 13 - Feb 10* *(20 days + 0 flex days = 20 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*		**Supplemental Resources**
Section A: Multiplicative Comparison MP2, MP3, MP6, MP7, MP8	**Goals:** Analyze, describe, and represent multiplicative comparison situations. Solve one-step and two-step problems involving multiplicative comparison.	7 days	• Comparing Money Raised • Biking through the Mountains • Donuts and Pastries
Section B: Measurement Conversion MP1, MP2, MP3,MP6, MP7	**Goals:** Convert from larger units to smaller units within a given system of measurement. Solve multi-step problems involving multiplicative comparison and measurement. Understand the relative sizes of kilometers, meters and centimeters, liters and milliliters, kilograms and grams, and pounds and ounces.	7 days	

Section C: Let's Put it to Work MP2, MP3, MP7, MP8	**Goals:** Solve multi-step problems involving multiplicative comparison and measurement.	6 days	

2024-25 Illustrative Math Instructional Guide Unit 6: Grade 4

Students multiply and divide multi-digit whole numbers using partial products and partial quotients strategies, and apply this understanding to solve multi-step problems using the four operations.

Unit 6 Instructional Window

Topic Lessons Standards Addressed: 4.OA.C.5 4.MD.A.2 4.NBT.B.4 4.NBT.B.5 4.OA.A.3 4.MD.A.3 4.NBT.B.6 4.OA.B.4 4.OA.A.2	*Feb 10 - March 27* *(28 days + 5 flex days = 33 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*		**Supplemental Resources**
Section A: Features of Patterns MP2, MP6, MP7, MP8	**Goals:** Generate a number or shape pattern that follows a given rule. Identify apparent features of a number pattern that were not explicit in the rule itself.	4 days + Possible Flex Day(s)	• Sharing Candy1 • Sharing Candy2 • Towers of Multiples
Section B: Multi-digit Multiplication MP2, MP3, MP7	**Goals:** Multiply a whole number of up to four digits by a one-digit whole number, and 2 two-digit numbers using strategies based on place value and the properties of operations.	9 days + Possible Flex Day(s)	
Section C: Multi-digit Divisoin MP2, M34, MP7, MP8	**Goals:** Divide numbers of up to four digits by one-digit divisors to find whole-number quotients and remainders, using strategies based on place value, properties of operations, and the relationship between multiplication and division.	9 days + Possible Flex Day(s)	

Section D: Let's Put It to Work: Problem Solving with Large Numbers MP1, MP2, MP3, MP4, MP7	**Goals:** Use the four operations to solve problems that involve multi-digit whole numbers and assess the reasonableness of answers..	6 days + Possible Flex Day(s)	

2024-25 Illustrative Math Instructional Guide Unit 7: Grade 4

Students learn to draw and identify points, rays, segments, angles, and lines, including parallel and perpendicular lines. Students also learn how to use a protractor to measure angles and draw angles of given measurements, and identify acute, obtuse, right, and straight angles in two-dimensional figures.

Unit 7 Instructional Window

Topic Lessons Standards Addressed: 4.G.A.1 4.MD.C.5 4.NBT.B.4 4.NBT.B.5 4.MD.C.5.a 4.MD.C.5.b 4.MD.C.6 4.MD.C.7 4.NBT.B.6 4.G.A.2		*March 28 - May 1* *(18 days + 1 flex days = 19 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Points, Lines, Segments, Rays and Angles MP3, MP4, MP6, MP7	**Goals:** Draw and identify points, lines, rays, segments, and parallel and intersecting lines in geometric figures. Recognize that angles are formed wherever two rays share a common endpoint and identify angles in two-dimensional figures.	6 days + Possible Flex Day	• The Geometry of Letters • Button Diameters • How High Did It Bounce? • Finding an Unknown Angle • Are These Right? • Lines of Symmetry for Triangles
Section B: The Size of Angles MP3, MP6, MP7, MP8	**Goals:** Recognize that angles can be measured in degrees, and can be found using addition and subtraction. Use a protractor to measure and draw angles, and recognize that perpendicular lines meet or cross at a right angle..	6 days	
Section C: Angle Analyis MP1, MP6, MP7	**Goals:** Draw and identify acute, obtuse, right, and straight angles in two-dimensional figures.	6 days	

	Write equations to represent angle relationships and reason about and find unknown measurements.		

2024-25 Illustrative Math Instructional Guide Unit 8: Grade 4

Students classify triangles and quadrilaterals based on the properties of their side lengths and angles, and learn about lines of symmetry in two-dimensional figures. They use their understanding of these attributes to solve problems, including problems involving perimeter and area.

Unit 8 Instructional Window

Topic Lessons Standards Addressed: 4.G.A.1 4.G.A.2 4.G.A.3 4.MD.C 4.NBT.B.5 4.NF.B.3.c 4.NF.B.4 4.MD.A 4.MD.A.3 4.MD.C.7 4.NF.B.4.b	*May 2 - May 15* *(10 days + 0 flex days = 10 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*		**Supplemental Resources**
Section A: Side Lengths, Angles, and Lines of Symmetry MP3, MP5, MP6, MP7, MP8	**Goals:** Classify triangles (including right triangles), parallelograms, rectangles, rhombuses, and squares based on the properties of their side lengths and angles. Identify and draw lines of symmetry in two-dimensional figures.	6 days	• Lines of Symmetry for Quadrilaterals • Lines of Symmetry for Circles • Is that Triangle Possible
Section B: Reason about Properties to Solve Problems MP2, MP3, MP4, MP6	**Goals:** Solve problems involving unknown side lengths, perimeter, area, and angle measurements using the known attributes and properties of two-dimensional shapes.	4 days	

2024-25 Illustrative Math Instructional Guide Unit 9: Grade 4

Students consolidate and solidify their understanding of various concepts and skills related to major work of the grade. They also continue to work toward fluency goals of the grade.

Unit 8 Instructional Window

Topic Lessons Standards Addressed: 4.NF.A.1 4.NF.A.2 4.NF.B.3 4.NF.B.3.a 4.NF.B.3.b 4.NF.B.3.c 4.NF.B.3.d 4.NF.B.4 4.NF.C.5 4.NF.C.6 4.NF.C.7 4.NBT.B 4.NBT.B.4 4.NBT.B.5 4.NBT.B.6 4.OA.A.2 4.OA.A.3 4.G.A.1 4.NBT.A 4.NBT.A.1 4.NF.B 4.OA 4.OA.A 4.OA.B.4 4.OA.C 4.OA.C.5		*May 16 - End of Year* *(14 days + 2 flex days = 16 days)* *Flex Days: catch up opportunity, Centers activities, and/or integrate Building Fact Fluency Kit lessons*	**Supplemental Resources**
Section A: Reason with Fractions MP2, MP3, MP7	**Goals:** Solve problems involving fraction equivalence and operating with fractions..	4 days + Possible Flex Day(s)	• Aliens vs Robots • Speed Skating • The Race
Section B: Whole-number Operations MP7, MP8	**Goals:** Add, subtract, multiply, and divide multi-digit numbers using place value understanding.	3 days + Possible Flex Day(s)	
Section C: Solve Problems with Multiplication and Division MP1, MP2, MP4	**Goals:** Solve problems involving measurement comparison..	4 days + Possible Flex Day(s)	

Section D: Creation and Design MP3	**Goals:** Review the major work of the grade by creating and designing instructional routines.	3 days	