

3 Mathematical Practice Standards

Standard	Descriptor	Citations	
	tions is not exhaustive. engage in the practice	We have provided citations to demonstrate studen standards.	its have many opportunities throughout the
1	Make sense of problems and persevere in solving them.	Bridges in Mathematics Unit 2: M1 S1; M1 S2 Unit 3: M1 S1; M3 S1 Unit 4: M2 S3 Unit 5: M1 S4; M2 S1 Unit 7: M4 S4 Unit 8: M1 S3; M4 S1	Number Corner September: Solving Problems October: Solving Problems November: Solving Problems February: Calendar Collector March: Solving Problems April: Calendar Collector, Solving Problems May: Solving Problems
2	Reason abstractly and quantitatively.	Bridges in Mathematics Unit 1: M2 S1; M4 S3; M4 S5 Unit 2: M2 S5 Unit 3: M1 S1 Unit 4: M1 S2 Unit 5: M4 S4 Unit 7: M4 S1 Unit 8: M3 S6; M4 S1; M3 S6	Number Corner September: Computational Fluency November: Solving Problems January: Solving Problems April: Calendar Grid May: Solving Problems
3	Construct viable arguments and critique the reasoning of others.	Bridges in Mathematics Unit 1: M2 S4; M3 S3; M4 S2 Unit 2: M1 S1 Unit 3: M1 S6; M4 S2 Unit 4: M3 S3 Unit 5: M2 S4 Unit 6: M4 S3 Unit 8: M4 S1	Number Corner October: Solving Problems November: Computational Fluency December: Calendar Grid January: Solving Problems February: Solving Problems March: Solving Problems May: Calendar Collector, Number Line
4	Model with mathematics.	Bridges in Mathematics Unit 1: M1 S1; M1 S2; M4 S5 Unit 2: M2 S2 Unit 4: M3 S4; M4 S3 Unit 5: M1 S3 Unit 6: M3 S2 Unit 7: M4 S2 Unit 8: M3 S3	Number Corner May: Calendar Grid

Standard	Descriptor	Citations	
	ations is not exhaustive. engage in the practice	. We have provided citations to demonstrate stud standards.	ents have many opportunities throughout the
5	Use appropriate tools strategically.	Bridges in Mathematics Unit 1: M2 S5; M3 S1 Unit 3: M1 S2; M2 S4 Unit 4: M2 S4 Unit 6: M1 S5 Unit 7: M2 S2 Unit 8: M1 S3; M4 S2	Number Corner December: Calendar Collector January: Calendar Collector February: Calendar Collector April: Calendar Collector, Number Line
6	Attend to precision.	Bridges in Mathematics Unit 1: M3 S1 Unit 2: M4 S2 Unit 3: M3 S4 Unit 4: M1 S6; M4 S1 Unit 5: M3 S3; M4 S2 Unit 6: M1 S4 Unit 7: M2 S4; M4 S4 Unit 8: M1 S1; M1 S2; M4 S4	Number Corner November: Calendar Collector, Computational Fluency December: Computational Fluency January: Number Line February: Number Line March: Number Line May: Number Line
7	Look for and make use of structure.	Bridges in Mathematics Unit 1: M1 S1; M1 S2; M2 S1; M2 S3; M3 S5 Unit 2: M2 S2; M3 S4 Unit 3: M2 S2 Unit 4: M1 S2 Unit 8: M1 S3; M3 S6; M4 S4	Number Corner September: Calendar Grid, Number Line October: Calendar Grid, Number Line November: Calendar Grid, Number Line December: Calendar Grid, Number Line January: Calendar Grid, Number Line February: Calendar Grid, Number Line March: Calendar Grid, Number Line April: Solving Problems May: Computational Fluency
8	Look for and express regularity in repeated reasoning.	Bridges in Mathematics Unit 1: M1 S4 Unit 2: M2 S4; M3 S2 Unit 3: M4 S1 Unit 4: M3 S2 Unit 5: M1 S2 Unit 6: M3 S3 Unit 7: M3 S4 Unit 8: M1 S1; M2 S5	Number Corner November: Number Line December: Solving Problems January: Computational Fluency February: Computational Fluency March: Calendar Grid, Calendar Collector, Computational Fluency April: Computational Fluency May: Calendar Grid, Calendar Collector

OA — Algebraic Reasoning: Operations

Standard	Descriptor	Citations	
3.OA.A Repre	sent and solve problem	is involving multiplication and division.	
3.OA.A.1	Represent and interpret multiplication of two factors as repeated addition of equal groups.	Bridges in Mathematics Unit 2: M1 S1; M1 S2; M1 S3; M1 S5; M2 S1; M2 S3; M2 S4; M2 S5; M3 S2; M3 S3; M3 S4; M4 S3 Unit 5: M1 S1; M1 S2; M1 S6 Unit 7: M1 S2	Number Corner September: Calendar Grid, Computational Fluency October: Computational Fluency November: Computational Fluency
3.OA.A.2	Represent and interpret whole- number quotients as dividing an amount into equal-sized groups.	Bridges in Mathematics Unit 5: M1 S2; M1 S3; M1 S4; M1 S6; M2 S1; M2 S2; M3 S1; M3 S2 Unit 6: M3 S5	Number Corner May: Solving Problems
3.OA.A.3	Use multiplication and division within 100 to solve problems in authentic contexts involving equal groups, arrays, and/ or measurement quantities.	Bridges in Mathematics Unit 2: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M1 S6; M3 S1; M3 S2 Unit 5: M1 S3; M1 S4; M2 S1; M2 S2 Unit 7: M2 S1; M2 S2	Number Corner September: Calendar Grid November: Solving Problems
3.0A.A.4	Determine the unknown number in a multiplication or division equation relating three whole numbers by applying the understanding of the inverse relationship of multiplication and division.	Bridges in Mathematics Unit 5: M2 S1; M2 S3; M3 S1	Number Corner November: Solving Problems April: Solving Problems May: Solving Problems

Standard	Descriptor	Citations	
3.OA.B Under	rstand properties of mu	Itiplication and the relationship between multiplica	tion and division.
3.OA.B.5	Apply properties of operations as strategies to multiply and divide.	Bridges in Mathematics Unit 7: M1 S3; M1 S4; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5	Number Corner November: Computational Fluency December: Solving Problems April: Computational Fluency, Solving Problems May: Computational Fluency
3.OA.B.6	Understand division as an unknown-factor in a multiplication problem.	Bridges in Mathematics Unit 5: M1 S5; M1 S6; M2 S1; M2 S2; M2 S3; M3 S4	Number Corner February: Computational Fluency April: Computational Fluency, Solving Problems May: Computational Fluency
3.OA.C Multip	oly and divide within 100	О.	
3.OA.C.7	Fluently multiply and divide within 100 using accurate, efficient, and flexible strategies and algorithms based on place value and properties of operations.	Bridges in Mathematics Unit 2: M2 S3; M2 S4; M2 S5; M3 S3; M3 S4; M4 S2; M4 S3 Unit 5: M2 S4; M3 S1; M3 S2; M3 S3; M3 S4	Number Corner February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector, Computational Fluency

Standard	Descriptor	Citations	
3.OA.D Solve	problems involving the	four operations, and identify and explain patterns	in arithmetic.
3.OA.D.8	Solve two-step problems in authentic contexts that use addition, subtraction, multiplication, and division in equations with a letter standing for the unknown quantity.	Bridges in Mathematics Unit 1: M4 S1; M4 S2 Unit 2: M4 S2 Unit 3: M3 S4 Unit 4: M2 S2; M2 S3 Unit 7: M1 S1; M1 S2 Unit 8: M4 S2	Number Corner October: Number Line November: Number Line January: Solving Problems
3.0A.D.9	Identify and explain arithmetic patterns using properties of operations, including patterns in the addition table or multiplication table.	Bridges in Mathematics Unit 1: M1 S3; M1 S4; M1 S5; M2 S2; M3 S3; M3 S4 Unit 2: M2 S2; M3 S3; M3 S4 Unit 7: M1 S5 Unit 8: M2 S1	Number Corner September: Number Line December: Computational Fluency January: Computational Fluency February: Computational Fluency March: Computational Fluency April: Computational Fluency May: Calendar Collector

Standard	Descriptor	Citations			
3.NBT.A Use p	S.NBT.A Use place value understanding and properties of operations to perform multidigit arithmetic.				
3.NBT.A.1	Use place value understanding to round whole numbers within 1000 to the nearest 10 or 100.	Bridges in Mathematics Unit 3: M1 S2; M1 S3; M1 S4; M3 S1; M3 S2; M3 S3; M3 S4	Number Corner November: Number Line December: Number Line		
3.NBT.A.2	Fluently add and subtract within 1000 using accurate, efficient, and flexible strategies and algorithms based on place value and properties of operations.	Bridges in Mathematics Unit 1: M2 S5; M3 S2; M3 S3; M4 S2; M4 S4 Unit 3: M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M3 S1; M3 S3; M4 S1; M4 S2; M4 S3; M4 S4 Unit 4: M2 S1; M2 S2	Number Corner September: Solving Problems October: Solving Problems		
3.NBT.A.3	Find the product of one-digit whole numbers by multiples of 10 in the range 10–90, such as 9 × 80. Students use a range of strategies and algorithms based on place value and properties of operations.	Bridges in Mathematics Unit 7: M1 S1; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5			

S NF — Numeric Reasoning: Fractions

Standard	Descriptor	Citations	
3.NF.A Develo	op understanding of fra	ctions as numbers.	
3.NF.A.1	Understand the concept of a unit fraction and explain how multiple copies of a unit fraction form a non-unit fraction.	Bridges in Mathematics Unit 4: M3 S1; M3 S2; M3 S3; M3 S4; M4 S2 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M3 S6; M4 S1	Number Corner October: Calendar Collector November: Calendar Collector December: Calendar Grid February: Calendar Collector April: Calendar Collector
3.NF.A.2	Understand a fraction as a number on the number line; Represent fractions on a number line diagram.	Bridges in Mathematics Unit 4: M3 S4; M3 S5; M4 S1; M4 S2 Unit 7: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5; M4 S1	Number Corner November: Calendar Collector January: Number Line February: Number Line March: Number Line April: Calendar Grid, Number Line May: Number Line
3.NF.A.3	Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.	Bridges in Mathematics Unit 4: M3 S2; M3 S3; M3 S5 Unit 6: M4 S2; M4 S3 Unit 7: M3 S1; M3 S2; M3 S3; M3 S5; M3 S6; M4 S1; M4 S3	Number Corner December: Calendar Grid January: Calendar Grid, Number Line February: Number Line March: Number Line April: Calendar Grid, Calendar Collector May: Calendar Grid, Number Line

3 GM — Geometric Reasoning and Measurement

Standard	Descriptor	Citations	
3.GM.A Reas	on with shapes and thei	r attributes.	
3.GM.A.1	Understand that shapes in different categories may share attributes and that shared attributes can define a larger category.	Bridges in Mathematics Unit 6: M1 S1; M1 S2; M1 S3; M1 S4; M1 S5; M2 S1; M2 S2; M2 S3; M2 S4; M2 S5; M2 S6 Unit 8: M2 S2; M2 S5; M4 S3	Number Corner October: Calendar Grid
3.GM.A.2	Partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.	Bridges in Mathematics Unit 4: M3 S1; M3 S2; M3 S3 Unit 6: M4 S1; M4 S3 Unit 7: M4 S2; M4 S3 Unit 8: M2 S1	Number Corner May: Calendar Grid
3.GM.B Solve	problems involving me	asurement and estimation.	
3.GM.B.3	Tell, write, and measure time to the nearest minute. Solve problems in authentic contexts that involve addition and subtraction of time intervals in minutes.	Bridges in Mathematics Unit 4: M2 S4; M2 S5 Unit 8: M2 S1; M3 S1; M3 S2; M3 S5; M4 S2	Number Corner January: Calendar Collector March: Calendar Grid
3.GM.B.4	Measure, estimate and solve problems in authentic contexts that involve liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (I).	Bridges in Mathematics Unit 4: M1 S3; M1 S4; M1 S5; M1 S6; M2 S1; M2 S2; M2 S3 Unit 8: M1 S2; M1 S4; M1 S5; M3 S2; M3 S3; M3 S4; M3 S5	Number Corner October: Calendar Collector December: Calendar Collector

Standard	Descriptor	Citations	
3.GM.C Geome	etric measurement: un	derstand concepts of area and relate area to multip	lication and to addition.
3.GM.C.5	Recognize area as an attribute of plane figures and understand concepts of area measurement presented in authentic contexts by tiling and counting unit squares.	Bridges in Mathematics Unit 5: M4 S1; M4 S2; M4 S3 Unit 6: M4 S1	Number Corner February: Calendar Grid
	Measure areas by	Bridges in Mathematics	Number Corner
3.GM.C.6	counting standard and non-standard unit squares.	Unit 5: M4 S1; M4 S2; M4 S3; M4 S4 Unit 6: M3 S5 Unit 8: M1 S2	February: Calendar Grid March: Calendar Collector
3.GM.C.7	Relate area to multiplication and addition. Use relevant representations to solve problems in authentic contexts.	Bridges in Mathematics Unit 5: M3 S3; M4 S1; M4 S4; M4 S5 Unit 6: M3 S3; M3 S4 Unit 7: M1 S5 Unit 8: M1 S2; M1 S4; M4 S3	Number Corner November: Calendar Grid February: Calendar Grid March: Calendar Collector, Solving Problems May: Calendar Grid
3.GM.D Geom	etric measurement: rec	cognize perimeter.	
3.GM.D.8	Solve problems involving authentic contexts for perimeters of polygons.	Bridges in Mathematics Unit 6: M3 S1; M3 S2; M3 S3; M3 S4; M3 S5 Unit 8: M2 S1; M4 S3	Number Corner February: Calendar Grid March: Calendar Collector, Solving Problems

3 DR — Data Reasoning

Standard	Descriptor	Citations	
3.DR.A Pose i	nvestigative questions	and collect/consider data.	
3.DR.A.1	Generate questions to investigate situations within the classroom, school or community. Collect or consider measurement data that can naturally answer questions by using information presented in a scaled picture and/or bar graph.	Bridges in Mathematics Unit 2: M3 S5; M4 S1; M4 S2 Unit 8: M1 S3; M1 S4; M1 S5; M2 S4; M3 S3; M4 S4	
3.DR.B Analyz	ze, represent, and interp	pret data.	
3.DR.B.2	Analyze measurement data with a scaled picture graph or a scaled bar graph to represent a data set with several categories. Interpret information presented to answer investigative questions.	Bridges in Mathematics Unit 2: M3 S5; M4 S1; M4 S2 Unit 8: M1 S5; M2 S4; M3 S3	Number Corner September: Calendar Collector February: Solving Problems March: Calendar Grid May: Calendar Collector