## SRA Mathematics Laboratory 2a

#### correlation to

## Texas Assessment of Knowledge and Skills (TAKS) for Mathematics Grade 4

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.1) Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals. The student is expected to:

(A) use place value to read, write, compare, and order whole numbers through the millions place.

Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Representing Numbers:** Cards 74, 75, 78, 81, 82, 83, 84

**Data & Graphs:** Cards 174, 175, 180

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.2) Number, operation, and quantitative reasoning. The student describes and compares fractional parts of whole objects or set of objects. The student is expected to:

(A) generate equivalent fractions using [concrete and] pictorial models.

Fraction Concepts: Cards 235, 237, 238

Add & Subtract Fractions: Card 260

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.2) Number, operation, and quantitative reasoning. The student describes and compares fractional parts of whole objects or set of objects. The student is expected to:

(B) model fraction quantities greater than one using [concrete materials and] pictures.

Fraction Concepts: Cards 236, 237, 238, 242, 247

Add & Subtract Fractions: Cards 267, 268, 269

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.2) Number, operation, and quantitative reasoning. The student describes and compares fractional parts of whole objects or set of objects. The student is expected to:

(C) compare and order fractions using [concrete and] pictorial models.

Fraction Concepts: Cards 235, 236, 239, 240, 241, 242, 243, 244, 245, 246, 247

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.2) Number, operation, and quantitative reasoning. The student describes and compares fractional parts of whole objects or set of objects. The student is expected to:

(D) relate decimals to fractions that name tenths and hundredths using models.

**Decimal Concepts:** Cards 208, 209, 210, 213

(4.3) Number, operation, and quantitative reasoning. The student adds and subtracts to solve meaningful problems involving whole numbers and decimals. The student is expected to:

(A) use addition and subtraction to solve problems involving whole numbers;

**Basic Facts: Add & Subtract:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

**Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

**Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.3) Number, operation, and quantitative reasoning. The student adds and subtracts to solve meaningful problems involving whole numbers and decimals. The student is expected to:

(B) add and subtract decimals to the hundredths place using [concrete and] pictorial models.

**Time & Money:** Cards 46, 47, 49

Add & Subtract Decimals: Cards 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

(A) models factors and products using arrays and area models.

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101

Multiply Whole Numbers by 1 Digit: Card 114

Multiply Whole Numbers by 2 Digits: Card 144

Patterns & Numbers: Card 197

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

(B) represent multiplication and division situations in picture, word, and number form.

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

**Divide Whole Numbers by 1 Digit:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

**Divide Whole Numbers by 2 Digits:** Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

(4.4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

(C) recall and apply multiplication facts through 12 x 12.

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 105, 108, 109, 110, 111, 112

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119

Patterns & Numbers: Cards 199, 205

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

(D) use multiplication to solve problems involving two-digit numbers.

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to:

(E) use division to solve problems involving one-digit divisors.

Basic Facts: Multiply & Divide: Cards 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114

Divide Whole Numbers by 1 Digit: Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

Divide Whole Numbers by 2 Digits: Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(4.5) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results. The student is expected to:

(A) round whole numbers to the nearest ten, hundred, or thousand to approximate reasonable results in problem situations.

Add Whole Numbers: Cards 25, 35, 37

Subtract Whole Numbers: Cards 55, 65, 68

Representing Numbers: Cards 76, 77, 78

Multiply Whole Numbers by 1 Digit: Cards 118, 124

Multiply Whole Numbers by 2 Digits: Card 143

**Divide Whole Numbers by 1 Digit:** Card 167

**Decimal Concepts:** Card 214

Divide Whole Numbers by 2 Digits: Card 252

(4.5) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results. The student is expected to:

(B) estimate a product or quotient beyond basic facts.

Multiply Whole Numbers by 1 Digit: Cards 118, 124

Multiply Whole Numbers by 2 Digits: Card 143

Divide Whole Numbers by 1 Digit: Card 167

Divide Whole Numbers by 2 Digits: Card 252

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(4.6) Patterns, relationships, and algebraic thinking. The student uses patterns in multiplication and division. The student is expected to:

(B) solve division problems related to multiplication facts (fact families) such as  $9 \times 9 = 81$  and  $81 \div 9 = 9$ .

Basic Facts: Multiply & Divide: Cards 110, 112

Divide Whole Numbers by 2 Digits: Card 249

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6) Patterns, relationships, and algebraic thinking. The student uses patterns in multiplication and division. The student is expected to:

(C) use patterns to multiply by 10 and 100.

**Linear Measurement:** Card 92

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 124

**Multiply Whole Numbers by 2 Digits:** Cards 140, 141, 142, 143, 145

Weight, Capacity, & Temperature: Card 227

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(7) Patterns, relationship, and algebraic thinking. The student uses organizational structures to analyze and describe patterns and relationships. The student is expected to:

(A) describe the relationship between two sets of related data such as ordered pairs in a table.

Basic Facts: Add & Subtract: Cards 12, 13

**Add Whole Numbers:** Card 31

Subtract Whole Numbers: Card 57

Basic Facts: Multiply & Divide: Cards 111, 112

Multiply Whole Numbers by 1 Digit: Card 117

Multiply Whole Numbers by 2 Digits: Card 142

Divide Whole Numbers by 1 Digit: Card 162

Patterns & Numbers: Cards 205, 206, 207

**Divide Whole Numbers by 2 Digits:** Card 256

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.8) Geometry and spatial reasoning. The student identifies and describes lines, shapes, and solids using formal geometric language. The student is expected to:

(A) identify right, acute, and obtuse angles.

Geometric Figures: Cards 133, 134, 135

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.8) Geometry and spatial reasoning. The student identifies and describes lines, shapes, and solids using formal geometric language. The student is expected to:

(B) identify models of parallel and perpendicular lines.

Geometric Figures: Cards 131, 134, 137

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.8) Geometry and spatial reasoning. The student identifies and describes lines, shapes, and solids using formal geometric language. The student is expected to:

(C) describe shapes and solids in terms of vertices, edges, and faces.

Geometric Figures: Cards 135, 136, 137, 139

Geometry Basics: Cards 157, 158, 160

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.9) Geometry and spatial reasoning. The student connects transformations to congruence and symmetry. The student is expected to:

(B) use translations, reflections, and rotations to verify that two shapes are congruent.

**Spatial Sense & Transformations:** Cards 272, 275, 276, 277, 278, 279, 280

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.9) Geometry and spatial reasoning. The student connects transformations to congruence and symmetry. The student is expected to:

(C) use reflections to verify that a shape has symmetry.

Spatial Sense & Transformations: Cards 270, 271, 274

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(4.10) Geometry and spatial reasoning. The student recognizes the connections between numbers and points on a number lie. The student is expected to:

(A) locate and name points on a number line using whole numbers, fractions such as halves and fourths, and decimals such as tenths.

Basic Facts: Add & Subtract: Cards 1, 3, 8, 13

Representing Numbers: Cards 79, 81, 82, 83, 84

Linear Measurement: Cards 88, 94, 95

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(4.11) Measurement. The student selects and uses appropriate units and procedures to measure weight and capacity. The student is expected to:

(A) estimate [and measure] weight using standard units including ounces, pounds, grams, and kilograms.

Weight, Capacity, & Temperature: Cards 219, 221, 223, 225, 226, 27, 228, 231

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(4.11) Measurement. The student selects and uses appropriate units and procedures to measure weight and capacity. The student is expected to:

(B) estimate [and measure] capacity using standard units including milliliters, liters, cups, pints, quarts, and gallons.

Weight, Capacity, & Temperature: Cards 220, 222, 224, 225, 226, 227, 229, 231

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(4.12) Measurement. The student applies measurement concepts. The student is expected to measure to solve problems involving length, including perimeter, time, temperature, and area.

(A) measure to solve problems involving length, including perimeter, time, temperature, and area.

Time & Money: Cards 50, 51, 52, 53, 54

**Linear Measurement:** Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97

Perimeter & Area: Cards 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

Weight, Capacity, & Temperature: Cards 219, 220, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Objective 5: The student will demonstrate an understanding of probability and statistics.

(4.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(A) list all possible outcomes of a probability experiment such as tossing a coin.

**Probability:** Cards 281, 282, 285, 288

Objective 5: The student will demonstrate an understanding of probability and statistics.

(4.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(B) use a pair of numbers to compare favorable outcomes to all possible outcomes such as four heads out of six tosses of coin.

**Probability:** Cards 283, 284, 286, 287, 288

Objective 5: The student will demonstrate an understanding of probability and statistics.

(4.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(C) interpret bar graphs.

**Data & Graphs:** Cards 177, 178, 180

(4.14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(A) identify the mathematics in everyday situations.

**Basic Facts: Add & Subtract:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

**Time & Money:** Cards 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54

**Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

**Representing Numbers:** Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

**Linear Measurement:** Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Geometric Figures: Cards 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Geometry Basics: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160

Divide Whole Numbers by 1 Digit: Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

Data & Graphs: Cards 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185

Perimeter & Area: Cards 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

Patterns & Numbers: Cards 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207

**Decimal Concepts:** Cards 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218

Weight, Capacity, & Temperature: Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247

Divide Whole Numbers by 2 Digits: Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Add & Subtract Fractions: Cards 260, 261, 262, 263, 264, 265, 266, 267, 268, 269

Spatial Sense & Transformations: Cards 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280

**Probability:** Cards 281, 282, 283, 284, 285, 286, 287, 288

(4.14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(B) use a problem-solving model that incorporates understanding the problem, make a plan, carrying out the plan, and evaluating the solution for reasonableness.

**Basic Facts: Add & Subtract:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

**Time & Money:** Cards 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54

**Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

**Representing Numbers:** Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

**Linear Measurement:** Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Geometric Figures: Cards 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

**Geometry Basics:** Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160

**Divide Whole Numbers by 1 Digit:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

**Data & Graphs:** Cards 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185

**Perimeter & Area:** Cards 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

Patterns & Numbers: Cards 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207

**Decimal Concepts:** Cards 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218

Weight, Capacity, & Temperature: Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247

Divide Whole Numbers by 2 Digits: Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Add & Subtract Fractions: Cards 260, 261, 262, 263, 264, 265, 266, 267, 268, 269

Spatial Sense & Transformations: Cards 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280

**Probability:** Cards 281, 282, 283, 284, 285, 286, 287, 288

(4.14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.

**Basic Facts: Add & Subtract:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

**Time & Money:** Cards 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54

**Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

**Representing Numbers:** Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

**Linear Measurement:** Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112

**Multiply Whole Numbers by 1 Digit:** Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Geometric Figures: Cards 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Geometry Basics: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160

**Divide Whole Numbers by 1 Digit:** Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

**Data & Graphs:** Cards 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185

Perimeter & Area: Cards 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

Patterns & Numbers: Cards 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207

**Decimal Concepts:** Cards 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218

Weight, Capacity, & Temperature: Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247

Divide Whole Numbers by 2 Digits: Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Add & Subtract Fractions: Cards 260, 261, 262, 263, 264, 265, 266, 267, 268, 269

Spatial Sense & Transformations: Cards 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280

**Probability:** Cards 281, 282, 283, 284, 285, 286, 287, 288

(4.15) Underlying processes and mathematical tools. The student communicates about Grade 4 mathematics using informal language. The student is expected to:

(B) relate informal language to mathematical language and symbols.

**Basic Facts: Add & Subtract:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

Place Value: Whole Numbers: Cards 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43

**Time & Money:** Cards 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54

**Subtract Whole Numbers:** Cards 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

**Representing Numbers:** Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84

**Linear Measurement:** Cards 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97

Basic Facts: Multiply & Divide: Cards 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129

Geometric Figures: Cards 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Geometry Basics: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160

Divide Whole Numbers by 1 Digit: Cards 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173

Data & Graphs: Cards 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185

Perimeter & Area: Cards 186, 187, 188, 189, 190, 191, 192, 193, 194, 195

Patterns & Numbers: Cards 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207

**Decimal Concepts:** Cards 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218

Weight, Capacity, & Temperature: Cards 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Fraction Concepts: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247

Divide Whole Numbers by 2 Digits: Cards 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259

Add & Subtract Fractions: Cards 260, 261, 262, 263, 264, 265, 266, 267, 268, 269

Spatial Sense & Transformations: Cards 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280

**Probability:** Cards 281, 282, 283, 284, 285, 286, 287, 288

(4.16) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to:

(A) make generalizations from patterns or sets of examples and nonexamples.

Basic Facts: Add & Subtract: Cards 5, 12

Basic Facts: Multiply & Divide: Card 111

Multiply Whole Numbers by 1 Digit: Cards 113, 114, 115, 116, 117, 118, 119

Geometric Figures: Cards 131, 134, 135, 136, 137, 138, 139

Multiply Whole Numbers by 2 Digits: Cards 140, 141, 142, 143

Geometry Basics: Cards 151, 156, 157, 158, 159, 160

**Data & Graphs:** Cards 174, 175, 176, 180, 183

**Patterns & Numbers:** Cards 199, 203, 204, 205, 206, 207

Spatial Sense & Transformations: Cards 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280

**Probability:** Cards 281, 282, 283, 284, 285, 286, 287

# SRA Mathematics Laboratory 2b

#### correlation to

### Texas Assessment of Knowledge and Skills (TAKS) for Mathematics Grade 5

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.1) Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals. The student is expected to:

(A) use place value to read, write, compare, and order whole numbers through the billions place.

Place Value: Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Representing Numbers:** Cards 43, 45, 46, 47, 49

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.1) Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals. The student is expected to:

(B) use place value to read, write, compare, and order decimals through the thousandths place.

**Decimal Concepts:** Cards 218, 219, 221, 222, 223, 224, 225, 228, 231

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.2) Number, operation, and quantitative reasoning. The student uses fractions in problem-solving situations. The student is expected to:

(A) generate equivalent fractions.

Fraction Concepts: Cards 120, 121, 124

Add Fractions: Cards 139, 140, 142, 143, 144

**Subtract Fractions:** Cards 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.2) Number, operation, and quantitative reasoning. The student uses fractions in problem-solving situations. The student is expected to:

(B) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators.

Fraction Concepts: Cards 123, 124, 125

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.2) Number, operation, and quantitative reasoning. The student uses fractions in problem-solving situations. The student is expected to:

(C) use models to relate decimals to fractions that name tenths, hundredths, and thousandths.

Decimal Concepts: Cards 220, 223, 230

Percent Concepts: Cards 295, 297, 298, 300

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

(A) use addition and subtraction to solve problems involving whole numbers and decimals.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6

**Add & Subtract Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

Add & Subtract Decimals: Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

(B) use multiplication to solve problems involving whole numbers (no more than three digits time two digits with technology).

**Basic Facts:** Cards 7, 8, 9, 11, 12, 13, 14

**Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

(C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology.

Basic Facts: Cards 10, 11, 12, 13, 14

Divide Whole Numbers: Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Patterns & Numbers: Card 110

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

(D) identify prime factors of a whole number and common factors of a set of whole numbers.

Patterns & Numbers: Cards 105, 106, 110, 111, 112, 113, 117

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.3) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to:

(E) models and record addition and subtraction of fractions with like denominators in problem-solving situations.

**Add Fractions:** Cards 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

**Subtract Fractions:** Cards 165, 167, 168, 169, 171, 172, 173, 174, 175, 176

(5.4) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results. The student is expected to:

(A) round whole numbers and decimals through tenths to approximate reasonable results in problem situations.

Add & Subtract Whole Numbers: Card 25

Representing Numbers: Cards 39, 40, 44

Multiply Whole Numbers: Cards 62, 69

Divide Whole Numbers: Card 89

Decimal Concepts: Cards 226, 227, 231

**Add & Subtract Decimals:** Cards 244, 248, 249, 254

#### Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.4) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results. The student is expected to:

(B) estimate to solve problems where exact answers are not required.

Add & Subtract Whole Numbers: Card 25

Multiply Whole Numbers: Cards 62, 69

Divide Whole Numbers: Card 89

Add Fractions: Card 145

Add & Subtract Decimals: Cards 244, 249

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(5.5) Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships. The student is expected to:

(A) use concrete objects or pictures to make generalizations about determining all possible combinations.

**Probability:** Cards 279, 281, 282, 283, 285, 286

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(5.5) Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships. The student is expected to:

(B) use lists, tables, charts, and diagrams to find patterns and make generalizations such as a procedure for determining equivalent fractions.

Add & Subtract Whole Numbers: Card 33

Multiply Whole Numbers: Cards 61, 67

Divide Whole Numbers: Cards 88, 96

**Patterns & Numbers:** Cards 107, 108, 109, 110, 111, 114, 115, 116, 117

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(5.5) Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships. The student is expected to:

(C) identify prime and composite numbers using concrete models and patterns in factor pairs.

Patterns & Numbers: Cards 105, 106, 112, 113, 117

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(5. 6) Patterns, relationship, and algebraic thinking. The student describes relationship mathematically. The student is expected to:

(A) select from and use diagrams and number sentences to represent real-life situations.

Basic Facts: Cards 5, 8, 9, 12, 13, 14

Add & Subtract Whole Numbers: Card 33

Multiply Whole Numbers: Card 65

Divide Whole Numbers: Card 97

Patterns & Numbers: Card 116

**Coordinate Graphs:** Cards 262, 263, 264, 266

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.7) Geometry and spatial reasoning. The student generates geometric definitions using critical attributes. The student is expected to:

(A) identify critical attributes including parallel, perpendicular, and congruent pairs of geometric shapes and solids.

**Geometric Basics:** Cards 78, 79, 80, 82, 83, 84, 86, 87

Geometric Figures: Cards 130, 131, 133, 135, 136, 137, 138

Spatial Sense & Transformations: Cards 235, 241

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.7) Geometry and spatial reasoning. The student generates geometric definitions using critical attributes. The student is expected to:

(B) use critical attributes to define geometric shapes or solids.

Geometric Basics: Cards 83, 84, 86, 87

Geometric Figures: Cards 130, 131, 133, 134

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.8) Geometry and spatial reasoning. The student models transformations. The student is expected to:

(A) sketch the results of translations, rotations, and reflections.

Spatial Sense & Transformations: Cards 233, 234, 235, 237

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.8) Geometry and spatial reasoning. The student models transformations. The student is expected to:

(B) describe the transformation that generates one figure from the other when given two congruent figures.

Geometric Figures: Card 135

Spatial Sense & Transformations: Cards 233, 234, 235, 237

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.9) Geometry and spatial reasoning. The student recognizes the connection between ordered pairs of numbers and locations of points on a plane. The student is expected to:

(A) locate and name the points on a coordinate grid using ordered pairs of whole numbers.

**Coordinate Graphs:** Cards 255, 256, 257, 258, 259, 260, 261, 265

Objective 4: The student will demonstrate an understanding of the concept and uses of measurement.

(5.10) Measurement. The student selects and uses appropriate units and procedures to measure volume. The student is expected to:

(A) measure volume using [concrete] models of cubic units.

Perimeter, Area & Volume: Cards 214, 215, 216, 217

Objective 4: The student will demonstrate an understanding of the concept and uses of measurement.

(5.11) Measurement. The student applies measurement concepts. The student is expected to:

(A) measure to solve problems involving length (including perimeter), weight, capacity, time, temperature, and area.

**Linear Measurement:** Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

Weight, Capacity, Temperature & Time: Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188

Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

Spatial Sense & Transformations: Cards 236, 239

Objective 4: The student will demonstrate an understanding of the concept and uses of measurement.

(5.11) Measurement. The student applies measurement concepts. The student is expected to:

(B) describe numerical relationships between units of measure within the same measurement system such as an inch is one-twelfth of a foot.

**Linear Measurement:** Cards 52, 53, 55, 56, 57

Weight, Capacity, Temperature & Time: Cards 179, 180, 183, 184, 185, 188

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.12) Probability and statistics. The student describes and predicts the results of a probability experiment. The student is expected to:

(A) use fractions to describe the results of an experiment.

**Probability:** Cards 284, 285, 286, 287, 288, 289

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.12) Probability and statistics. The student describes and predicts the results of a probability experiment. The student is expected to:

(B) use experimental results to make predictions.

**Probability:** Cards 280, 284, 285, 286, 287, 288, 289

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(A) use tables of related number pairs to make line graphs.

Data & Graphs: Cards 160, 164

**Coordinate Graphs:** Cards 255, 256, 257, 258, 259, 260, 261

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(B) describe characteristics of data presented in tables and graphs including the shape and spread of the data and the middle number.

**Data & Graphs:** Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:

(C) graph a given set of data using an appropriate graphical representation such as a picture or line.

**Data & Graphs:** Cards 157, 158, 159, 160, 161, 164

(5. 14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(A) identify the mathematics in everyday situations.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Place Value: Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add & Subtract Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

**Representing Numbers:** Cards 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49

**Linear Measurement:** Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

**Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

Geometric Basics: Cards 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87

**Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Patterns & Numbers: Cards 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117

Fraction Concepts: Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128

Geometric Figures: Cards 129, 130, 131, 132, 133, 134, 135, 136, 137, 138

**Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Data & Graphs: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

**Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176

Weight, Capacity, Temperature & Time: Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188

**Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

Decimal Concepts: Cards 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

**Spatial Sense & Transformations:** Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242

**Add & Subtract Decimals:** Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254

Coordinate Graphs: Cards 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266

Multiply & Divide Decimals: Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

**Probability:** Cards 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(B) use a problem-solving model that incorporates understanding the problem, make a plan, carrying out the plan, and evaluating the solution for reasonableness.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Place Value: Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add & Subtract Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

**Representing Numbers:** Cards 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49

**Linear Measurement:** Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

**Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

Geometric Basics: Cards 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87

**Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Patterns & Numbers: Cards 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117

Fraction Concepts: Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128

Geometric Figures: Cards 129, 130, 131, 132, 133, 134, 135, 136, 137, 138

**Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Data & Graphs: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

**Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176

Weight, Capacity, Temperature & Time: Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188

**Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

**Decimal Concepts:** Cards 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

Spatial Sense & Transformations: Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242

Add & Subtract Decimals: Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254

**Coordinate Graphs:** Cards 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266

Multiply & Divide Decimals: Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

**Probability:** Cards 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:

(C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Place Value: Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add & Subtract Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

**Representing Numbers:** Cards 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49

**Linear Measurement:** Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

Multiply Whole Numbers: Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

Geometric Basics: Cards 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87

**Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Patterns & Numbers: Cards 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117

Fraction Concepts: Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128

Geometric Figures: Cards 129, 130, 131, 132, 133, 134, 135, 136, 137, 138

**Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Data & Graphs: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

**Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176

Weight, Capacity, Temperature & Time: Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188

Multiply & Divide Fractions: Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

Decimal Concepts: Cards 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

**Spatial Sense & Transformations:** Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242

Add & Subtract Decimals: Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254

Coordinate Graphs: Cards 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266

**Multiply & Divide Decimals:** Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

**Probability:** Cards 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

(5.15) Underlying processes and mathematical tools. The student communicates about Grade 5 mathematics using informal language. The student is expected to:

(B) relate informal language to mathematical language and symbols.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Place Value: Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

**Add & Subtract Whole Numbers:** Cards 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

**Representing Numbers:** Cards 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49

**Linear Measurement:** Cards 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

**Multiply Whole Numbers:** Cards 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

Geometric Basics: Cards 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87

**Divide Whole Numbers:** Cards 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104

Patterns & Numbers: Cards 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117

Fraction Concepts: Cards 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128

Geometric Figures: Cards 129, 130, 131, 132, 133, 134, 135, 136, 137, 138

**Add Fractions:** Cards 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150

Data & Graphs: Cards 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

**Subtract Fractions:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176

Weight, Capacity, Temperature & Time: Cards 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188

**Multiply & Divide Fractions:** Cards 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200

Perimeter, Area & Volume: Cards 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217

**Decimal Concepts:** Cards 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231

**Spatial Sense & Transformations:** Cards 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242

**Add & Subtract Decimals:** Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254

Coordinate Graphs: Cards 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266

Multiply & Divide Decimals: Cards 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278

**Probability:** Cards 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

(5.16) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to:

(A) make generalizations from patterns or sets of examples and nonexamples.

**Basic Facts:** Cards 2, 4, 8, 9, 13

Add & Subtract Whole Numbers: Card 33

Multiply Whole Numbers: Cards 61, 67, 68

Divide Whole Numbers: Cards 88, 96

Patterns & Numbers: Cards 107, 108, 109, 110, 111, 114, 115, 116, 117

Data & Graphs: Card 132

Spatial Sense & Transformations: Card 240

Multiply & Divide Decimals: Cards 269, 272, 277

**Probability:** Cards 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289

## SRA Mathematics Laboratory 2c

### correlation to

### Texas Assessment of Knowledge and Skills (TAKS) for Mathematics Grade 6

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.1) Number, operation, and quantitative reasoning. The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

(A) compare and order non-negative rational numbers.

**Place Value: Whole Numbers:** Cards 34, 35, 36, 39, 40, 41

Fraction & Decimal Concepts: Cards 99, 100, 101, 106, 107, 108

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.1) Number, operation, and quantitative reasoning. The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

(B) generate equivalent forms of rational numbers including whole numbers, fractions, and decimals.

Place Value: Whole Numbers: Card 33

Representing Numbers: Cards 60, 61, 62

Fraction & Decimal Concepts: Cards 96, 97, 98, 101, 103, 104, 105, 108

Add & Subtract Fractions: Card 122

**Multiply Decimals:** Card 211

Divide Decimals: Card 239

Using Decimals & Percents: Cards 253, 254, 256

Ratios & Proportions: Cards 274, 275, 277, 280, 281

(6.1) Number, operation, and quantitative reasoning. The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

#### (C) use integers to represent real-life situations.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Add & Subtract Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Place Value: Whole Numbers: Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

Multiply & Divide Whole Numbers: Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Patterns & Numbers: Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

Multiply Decimals: Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212

**Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Using Decimals & Percents: Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

### Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.1) Number, operation, and quantitative reasoning. The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

(D) write prime factorizations using exponents.

Patterns & Numbers: Cards 84, 92, 93, 94

#### Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.1) Number, operation, and quantitative reasoning. The student represents and uses rational numbers in a variety of equivalent forms. The student is expected to:

(E) identify factors and multiples including common factors and common multiples.

Patterns & Numbers: Cards 84, 85, 86, 87, 88, 89, 90, 92, 93, 94

Fraction & Decimal Concepts: Cards 98, 99

Add & Subtract Fractions: Card 122

#### Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.2) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to:

(A) model addition and subtraction situations involving fractions with objects, pictures, words, and numbers.

**Add & Subtract Fractions:** Cards 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

(6.2) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to:

(B) uses addition and subtraction to solve problems involving fractions and decimals.

Add & Subtract Fractions: Cards 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning. (6.2) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to:

(C) use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates.

Multiply & Divide Whole Numbers: Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(6.2) Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. The student is expected to:

(D) estimate and round to approximate reasonable results and to solve problems where exact answers are not required.

**Add & Subtract Whole Numbers:** Cards 15, 16, 17, 23, 24, 25, 31

Multiply & Divide Whole Numbers: Cards 44, 49, 51, 59

Fraction & Decimal Concepts: Card 102

Add & Subtract Fractions: Cards 127, 131

Add & Subtract Decimals: Cards 177, 182

Divide Decimals: Cards 228, 238

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.3) Patterns, relationships, and algebraic thinking. The student solves problems involving proportional relationships. The student is expected to:

(A) use ratios to describe proportional situations.

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.3) Patterns, relationships, and algebraic thinking. The student solves problems involving proportional relationships. The student is expected to:

(B) represent ratios and percents with concrete models, fractions, and decimals.

**Using Decimals & Percents:** Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.3) Patterns, relationships, and algebraic thinking. The student solves problems involving proportional relationships. The student is expected to:

(C) use ratios to make predictions in proportional situations.

Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.4) Patterns, relationship, and algebraic thinking. The student uses letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes. The student is expected to:

(A) uses tables and symbols to represent and describe proportional and other relationships involving conversions, sequences, perimeter, area, etc.

Basic Facts: Cards 11, 13, 14

Add & Subtract Whole Numbers: Card 26

Multiply & Divide Whole Numbers: Cards 55, 56

Representing Numbers: Cards 60, 61, 62

Patterns & Numbers: Card 91

**Perimeter & Area:** Cards 214, 217, 219, 221, 222, 223, 225, 226, 227

Surface Area & Volume: Cards 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 289, 290

**Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.4) Patterns, relationship, and algebraic thinking. The student uses letters as variables in mathematical expressions to describe how one quantity changes when a related quantity changes. The student is expected to:

(B) generate formulas to represent relationships involving perimeter, area, volume of a rectangular prism, etc., from a table of data.

Perimeter & Area: Cards 213, 214, 217, 219, 220, 221, 222, 223, 224, 225, 226, 227

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Algebra Concepts: Cards 298, 300

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(6.5) Patterns, relationship, and algebraic thinking. The student uses letters to represent an unknown in an equation. The student is expected to:

(A) formulate an equation from a problem situation.

**Basic Facts:** Cards 1, 2, 4, 5, 6, 8, 9, 10, 11, 14

Add & Subtract Whole Numbers: Card 26

Multiply & Divide Whole Numbers: Cards 55, 56

Patterns & Numbers: Card 91

**Perimeter & Area:** Cards 214, 217, 219, 221, 222, 223, 224, 225, 226, 227

**Surface Area & Volume:** Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251

Coordinate Graphs: Cards 289, 290

**Algebra Concepts:** Cards 292, 293, 294, 295, 296, 297, 298, 299, 300

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(6. 6) Geometry and spatial reasoning. The student uses geometric vocabulary to describe angles, polygons, and circles. The student is expected to:

(A) use angle measurements to classify angles as acute, obtuse, or right.

**Measurement:** Cards 112, 114, 115, 117, 118, 120

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(6.6) Geometry and spatial reasoning. The student uses geometric vocabulary to describe angles, polygons, and circles. The student is expected to:

(B) identify relationships involving angles in triangles and quadrilaterals.

Measurement: Cards 117, 118, 120, 121

Geometric Figures: Cards 169, 171

Spatial Sense & Transformations: Cards 263, 264

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(6.6) Geometry and spatial reasoning. The student uses geometric vocabulary to describe angles, polygons, and circles. The student is expected to:

(C) describe the relationship between radius, diameter, and circumference of a circle.

Perimeter and Area: Cards 224, 225, 226, 227

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(6.7) Geometry and spatial reasoning. The student uses coordinate geometry to identify location in two dimensions. The student is expected to:

(A) to locate and name points on a coordinate plane using ordered airs of non-negative rational numbers.

**Coordinate Graphs:** Cards 284, 285, 286, 287, 288, 289, 290, 291

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(6.8) Measurement. The student solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight, and angles. The student is expected to:

(A) estimate measurements and evaluate reasonableness of results.

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

**Measurement:** Cards 109, 110, 111, 113

Perimeter and Area: Card 216

#### Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(6.8) Measurement. The student solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight, and angles. The student is expected to:

(B) select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter and circumference), area, time, temperature, capacity, and weight.

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

Measurement: Cards 109, 110, 111, 112, 113

Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

**Algebra Concepts:** Card 298

#### Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(6.8) Measurement. The student solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight, and angles. The student is expected to:

(C) measure angles.

**Measurement:** Cards 112, 113, 114, 115, 116, 118, 120, 121

#### Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(6.8) Measurement. The student solves application problems involving estimation and measurement of length, area, time, temperature, capacity, weight, and angles. The student is expected to:

(D) convert measures within the same measurement system (customary and metric) based on relationships between units.

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

#### Objective 5: The student will demonstrate an understanding of probability and statistics.

(6.9) Probability and statistics. The student uses experimental and theoretical probability to make predictions. The student is expected to:

(A) construct sample spaces using lists, tree diagrams, and combinations.

**Probability:** Cards 188, 189, 190, 192, 193, 194, 195, 196

#### Objective 5: The student will demonstrate an understanding of probability and statistics.

(6.9) Probability and statistics. The student uses experimental and theoretical probability to make predictions. The student is expected to:

(B) find the probabilities of a simple event and its complement and describe the relationship between the two.

**Probability:** Cards 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201

Objective 5: The student will demonstrate an understanding of probability and statistics. (6.10) Probability and statistics. The student uses statistical representations to analyze data.

(A) [draw and] compare different graphical representations of the same data.

**Data and Graphs:** Cards 138, 139, 140, 147, 148, 149

Objective 5: The student will demonstrate an understanding of probability and statistics.

(6.10) Probability and statistics. The student uses statistical representations to analyze data.

(B) use median, mode, and range to describe data.

**Data and Graphs:** Cards 138, 139, 140, 141, 142, 145, 147, 148, 153

Objective 5: The student will demonstrate an understanding of probability and statistics.

(6.10) Probability and statistics. The student uses statistical representations to analyze data.

(C) sketch circle graphs to display data.

Data and Graphs: Cards 146, 153

Objective 5: The student will demonstrate an understanding of probability and statistics.

(6.10) Probability and statistics. The student uses statistical representations to analyze data.

(D) solve problems by collecting, organizing, displaying, and interpreting data.

**Data and Graphs:** Cards 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

(6.11) Underlying processes and mathematical tools. The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to:

(A) identify and apply mathematics in everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

**Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

**Place Value: Whole Numbers:** Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

**Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

Patterns & Numbers: Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Fraction & Decimal Concepts: Cards 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

**Measurement:** Cards 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Data and Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

**Multiply & Divide Fractions:** Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Geometric Figures: Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

**Probability:** Cards 188, 189, 190, 191, 192, 193, 194, 195 196, 197, 198, 199, 200, 201

 $\textbf{Multiply Decimals:} \ \text{Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212}$ 

Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

**Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

**Using Decimals & Percents:** Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Spatial Sense & Transformations:** Cards 263, 264, 265, 266, 267, 268, 269, 270, 271, 272

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 284, 285, 286, 287, 288, 289, 290, 291

(6.11) Underlying processes and mathematical tools. The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to:

(B) use a problem-solving model that incorporates understanding the problem, make a plan, carrying out the plan, and evaluating the solution for reasonableness.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

**Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

**Place Value: Whole Numbers:** Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

**Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

Patterns & Numbers: Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Fraction & Decimal Concepts: Cards 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

**Measurement:** Cards 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Data and Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Geometric Figures: Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

**Probability:** Cards 188, 189, 190, 191, 192, 193, 194, 195 196, 197, 198, 199, 200, 201

**Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212

Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

**Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Using Decimals & Percents: Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Spatial Sense & Transformations:** Cards 263, 264, 265, 266, 267, 268, 269, 270, 271, 272

**Ratios & Proportions:** Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 284, 285, 286, 287, 288, 289, 290, 291

(6.11) Underlying processes and mathematical tools. The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to:

(C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

**Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Place Value: Whole Numbers: Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

Multiply & Divide Whole Numbers: Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

**Patterns & Numbers:** Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Fraction & Decimal Concepts: Cards 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

Measurement: Cards 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Data and Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Geometric Figures: Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

**Probability:** Cards 188, 189, 190, 191, 192, 193, 194, 195 196, 197, 198, 199, 200, 201

**Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212

**Perimeter & Area:** Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

**Divide Decimals:** Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

**Using Decimals & Percents:** Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Spatial Sense & Transformations:** Cards 263, 264, 265, 266, 267, 268, 269, 270, 271, 272

Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 284, 285, 286, 287, 288, 289, 290, 291

(6.12) Underlying processes and mathematical tools. The student communicates about Grade 6 mathematics through informal and mathematical language, representations, and models. The student is expected to:

(A) communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Add & Subtract Whole Numbers: Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Place Value: Whole Numbers: Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

**Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

**Patterns & Numbers:** Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Fraction & Decimal Concepts: Cards 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

**Measurement:** Cards 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Data and Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

Geometric Figures: Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175

**Add & Subtract Decimals:** Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

**Probability:** Cards 188, 189, 190, 191, 192, 193, 194, 195 196, 197, 198, 199, 200, 201

**Multiply Decimals:** Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212

Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Divide Decimals: Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

Using Decimals & Percents: Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

**Spatial Sense & Transformations:** Cards 263, 264, 265, 266, 267, 268, 269, 270, 271, 272

Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 284, 285, 286, 287, 288, 289, 290, 291

(6.13) Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions. The student is expected to:

(A) make conjectures from patterns or sets of examples and nonexamples.

**Basic Facts:** Cards 3, 4, 7, 8, 9, 10, 11, 12, 13, 14

Add & Subtract Whole Numbers: Card 26

**Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 50, 51, 55

Representing Numbers: Cards 60, 61, 62

Patterns & Numbers: Cards 86, 87, 88, 89, 90

Data and Graphs: Cards 149, 150

Multiply & Divide Fractions: Card 159

Geometric Figures: Cards 169, 171

**Probability:** Cards 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201

**Multiply Decimals:** Cards 202, 206, 207, 211, 212

Divide Decimals: Cards 233, 234

Ratios & Proportions: Card 274

(6.13) Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions. The student is expected to:

(B) validate his/her conclusions using mathematical properties and relationships.

**Basic Facts:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

**Add & Subtract Whole Numbers:** Cards 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Place Value: Whole Numbers: Cards 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

**Multiply & Divide Whole Numbers:** Cards 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59

**Representing Numbers:** Cards 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73

Weight, Capacity & Time: Cards 74, 75, 76, 77, 78, 79, 80, 81, 82, 83

**Patterns & Numbers:** Cards 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94

Fraction & Decimal Concepts: Cards 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108

Measurement: Cards 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121

Add & Subtract Fractions: Cards 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137

Data and Graphs: Cards 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153

Multiply & Divide Fractions: Cards 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164

**Geometric Figures:** Cards 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175

Add & Subtract Decimals: Cards 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187

Probability: Cards 188, 189, 190, 191, 192, 193, 194, 195 196, 197, 198, 199, 200, 201

Multiply Decimals: Cards 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212

Perimeter & Area: Cards 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227

Divide Decimals: Cards 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240

Surface Area & Volume: Cards 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252

**Using Decimals & Percents:** Cards 253, 254, 255, 256, 257, 258, 259, 260, 261, 262

Spatial Sense & Transformations: Cards 263, 264, 265, 266, 267, 268, 269, 270, 271, 272

Ratios & Proportions: Cards 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283

Coordinate Graphs: Cards 284, 285, 286, 287, 288, 289, 290, 291