

The Curriculum Matrix is based on the twelve areas of the National Council of Teachers Mathematics standards. The areas are Algebra, Data Interpretation, Decimals, Fractions, Functions, Geometry, Mathematics Process, Measurement, Number Theory, Numeration Technology, and Whole Numbers.

Each area of the standard, labeled a strand, is defined, competencies identified, and specific skills that address the competency listed for each level.

ALGEBRA		
Readiness	TEKS	4/E
Missing numbers and number sentences	4.1B,C	7
Order of Operations	4.1B,C	8
Multiple steps (see Mathematical Process)		
Number line		
- whole numbers		
Exponents and powers	4.1B,C,D,E,F	9,10
Scientific Notation		
- positive powers of 10		
- negative power of 10		
Squares and square roots		
Operations		4/E
Variables		
Writing equations	4.1F	11
Integers (Negative/Positive)		
- define		***(F13)***
- compare/order		
- addition/subtraction		
- multiplication/division		
Solve 1 step equations		
- addition/subtraction	4.1B,C	12,13
- multiplication/division		
- input/output table	4.1B,C,D,E	14

Solve 2 step equations		
Solve equations with 2 variables		
Inequalities		
Formulas		
Rational Numbers - identify and simplify		
Polynomials		
- represent and simplify		
- adding		
- subtracting		
-multiplying monomials and binomials		
- factoring		
Coordinate Graphing		
- coordinates in four quadrants		
- equations (See Functions)		
- inequalities		
- slope		

DATA INTERPRETATION

Readiness		4/E
Pictographs	4.1B,C,D,E; 4.9A	15
Bar graphs	4.1B,C,D,E; 4.9A	16
Line graphs	4.1B,C,D,E; 4.9A	17
Line plots		
Double line graphs		
Circle graphs	4.1B,C,D,E; 4.9A	18
Stem and leaf diagrams	4.1B,C,D,E; 4.9A	19,20
Box diagrams (Box And Whisker)		
Scatter plots	4.1B,C,D,E; 4.9A	21,22
Collection		4/E
Tally charts	4.1B,C,D,E; 4.9A	23
Tally chart and frequency distribution		
Range, mode, median, mean	4.1B,C,D,E,F,G	24,25

Sampling		
Probability		4/E
Predicting outcomes	4.1A,B,C,D	26
Probabilities	4.1A,B,C,D	27

DECIMALS

Concepts		4/E
Meaning of decimals	4.1C,F; 4.2A,E	28,29
Compare/order	4.1C,F; 4.2A,C,E	30,31
Related to fractions	4.1C,F; 4.2G; 4.3A	32,33
Related to percent		
Related to money	4.1A,B,C,D,F; 4.2E; 4.4A	34,35
Place value	4.1B,C,F	36,37
Rounding	4.1C,F; 4.2D	38,39
Operations		4/E
Addition	4.1A,B,C,F; 4.4A	40,41
Subtraction	4.1A,B,C,F; 4.4A	42,43
Multiplication		
Division		
- whole number divisor		
- decimal divisor		
- repeating decimals/terminating decimals		
Estimating		

FRACTIONS

Concepts		4/E
Part of a whole/part of a set	4.1B,C,D,F; 4.2D	44
Lowest terms/simplest form	4.1B,C,F; 4.3A	45,46
Comparing and ordering	4.1D,F; 4.3A,D	47
Rounding/estimating	4.1B,C,F; 4.3A,E	48
Related to decimals	4.1B,C,F; 4.2D; 4.3A	49,50
Related to percent		
Least Common Denominator (LCD)	4.1B,C,F; 4.3A,C,E	51,52

Equivalent fractions	4.1B,C,F; 4.3A,C	53
Mixed numbers	4.1B,C,F; 4.3B	54
- related to improper fractions	4.1B,C,F; 4.3B	55,56
Operations		4/E
Addition		
- like denominators	4.1A,B,C; 4.3A,E	57
- unlike denominators	4.1B,C; 4.3A	58,59
- mixed numbers	4.1B,C; 4.3A,B,C	60,61
Subtraction		
- like denominators	4.1B,C,F; 4.3A,E	62
- unlike denominators	4.1B,C,F; 4.3A	63,64
- mixed numbers	4.1B,C,F; 4.3A,B,C	65,66
- regrouping		
- mixed numbers with regrouping		
Multiplication		
- simple fractions	4.1A,B,C,F; 4.3A	67,68
- mixed numbers		
- simplifying		
Division		
- reciprocal		
- whole numbers		
- mixed numbers		
- solve equations		
FUNCTIONS		
Relationships		4/E
Tables	4.1A,B,C,D,E,F; 4.9A	69
Ordered pairs	4.1C,D,E,G	71
Line graphs (See Data Interpretation)	4.1A,B,C,D,E	17
Venn Diagrams	4.1A,B,C,D	70
Graphing equations		
GEOMETRY		

Concepts		4/E
Segments/rays	4.1D,F; 4.6D	72,73,74,75
Angles		
- classify	4.1D,F; 4.6A,D,F	76,77
- measuring		
- complementary/supplementary		
- vertical/corresponding/alternative interior		
Lines		
- parallel	4.1D; 4.6A	78,79
- perpendicular	4.1A,D,F; 4.6A,C	80,81
- parallel & perpendicular		
- symmetry	4.1D; 4.6D	82
- skew		
Congruence	4.1D; 4.6D	83
Sides, corners, vertices, edges	4.1D,E,F; 4.6A	84
Transformations (slides, turns, flips)	4.1D,E,F	85
Solid Shapes (sphere, cone, cylinder, cube, pyramid, prism)		4/E
Identify	4.1D; 4.6A	86
Sorting and Classifying	4.1D,E,F; 4.6A	87
Plane Shapes		4/E
Open and closed	4.1D; 4.6A	88,89
Polygons (quadrilaterals, square, pentagon, hexagon, octagon)	4.1D,F; 4.6A,D	90
Triangles		
- classify	4.1D,F; 4.6A,C,D	91,92
- congruent		
Parallelogram	4.1D,F; 4.6D	93,94
Diagonals		
Demensional Shapes		4/E
Recognize by given specifications		
Pythagorean Theorem		

MATHEMATICAL PROCESS

Problem Solving		4/E
Choose an operation	4.1A,B,C	95
Multiple-step problems	4.1A,B,C; 4.4H	96
Using Estimation	4.1A,B,C; 4.4G	97
Make an organized list	4.1A,B,C,E	98
Make a table	4.1A,B,C,D,E; 4.5A; 4.9A	99
Information - too much/too little		
Reasoning		4/E
Sequencing		
Classifying	4.1B,C,F	100
Compare/contrast	4.1A,B,C,D	101
Generalizations	4.1B,C,D	102
Drawing conclusions	4.1A,B	103
Visual patterns (See Funtions)	4.1B,C,D,E	127,128,129
Reasoning	4.1A,B,C,D	104
Computation Strategies		4/E
multiply/divide by multiples and powers of 10		

MEASUREMENT

Length		4/E
Nonstandard units		
Standard units	4.1A; 4.8A	105
Metric	4.1A; 4.8A,B	106
Capacity		4/E
Nonstandard units		
Standard units	4.1A; 4.8A,B,C	107
Metric	4.1A; 4.8A,B	110
Weight		4/E
Nonstandard units		
Standard units	4.1A; 4.8A,B,C	108
Metric	4.1A; 4.8A,B	109
Converting Metrics		

Reasoning		4/E
Fahrenheit	4.1A,D	111
Celsius	4.1A,D	112
Convert		
Area - Volume		4/E
Perimeter	4.1A,B	113
Area	4.1B,C,D; 4.5C,D	114
Volume	4.1B,C,D; 4.5C,D; 4.8C	115
Surface Area		
Circumference		*** (F120) ***
Circumference - Diameter/radius		
Time		4/E
Elapsed	4.1A,B,C,D; 4.8C	116
Clock	4.1A,B,C,D; 4.8C	117
Calendar	4.1A,B,C,D; 4.8C	118
Time zones		
Money		4/E
Identify coins		
Identify value		
Making change	4.1A,B,C; 4.2E	119
Value comparison	4.1A,B,C; 4.2E	120
NUMBER THEORY		
Number Sense		4/E
Counting		
Place value	4.1C,F; 4.2A,B	121
Integers		
Greater than - less than	4.1A,B,C; 4.2C	122
Even and odd numbers	4.1C,F; 4.2C	123
Prime and composite numbers		
Prime factorizaion		
Divisibility	4.1C,F; 4.4F	124

Factors and greatest common factors	4.1C,F; 4.4D	125
Multiples and least common multiples	4.1C,D,F; 4.4B,D	126
Ratio and Proportion		4/E
Ratios		
Equal ratios		
Rate and unit price		
Percent		4/E
Related to ratios		
Related to fractions/decimals		
Finding a percent of a number		
Find what percent one number is of another		
Find a number when a percent is known		
Interest, discount, commission		
NUMERATION		
Patterns		4/E
With objects/geometric figures	4.1C,D,E	127
With numbers	4.1C,D,E	128
Skip counting	4.1C,D,E	129
Patterns		4/E
Meaning of numbers		
Reading and writing numbers	4.1A,C,D,G	130
Ordinal numbers		
Roman Numerals	4.1A,C,D,G	131
Estimation		4/E
Using front-end digits	4.1A,B,C,D; 4.4A	132
Rounding whole numbers/decimals	4.1A,B,C,D; 4.2D; 4.4G	133
Rounding fractions/mixed numbers	4.1A,B,C,D; 4.2G; 4.3F	134
Compatible numbers		
Clustering		
TECHNOLOGY		
Calculator		4/E

Whole number operation	4.1B,C; 4.4A,D,E,F	135
Decimals/money	4.1A,B,C; 4.2B,G; 4.4A	136
Fractions	4.1B,C; 4.2B,G; 4.3G; 4.4A	137
Percent		
WHOLE NUMBERS		
Addition		4/E
Vocabulary of addition		
Related to subtraction		
Fact families	4.1C; 4.4A	139
Basic facts and fact strategies		
Properties	4.1B,C,D,G; 4.4B,H	140
Three or more addends	4.1A,B,C; 4.4A	141
Adding 2-digit numbers		
- regrouping		
Adding 3-digit numbers	4.1A,B,C; 4.4A,G	142
- regrouping	4.1A,B,C; 4.4A,	143
Adding with 4 or more digits	4.1A,B,C; 4.4A,	144
- regrouping	4.1A,B,C; 4.4A,	145
Estimation and mental math	4.1A,B,C; 4.4A,G	146
Subtraction		4/E
Vocabulary of subtraction		
Related to addition		
Basic facts and fact strategies		
Subtracting 2-digit numbers		
- regrouping		
- with zeros	4.1A,B,C; 4.4A	147
Subtracting 3-digit numbers		
- regrouping		148
- with zeros	4.1A,B,C; 4.4A	149
Subtracting with 4 or more digits	4.1A,B,C; 4.4A	150
- regrouping	4.1A,B,C; 4.4A	151,152

- with zeros	4.1A,B,C; 4.4A	153
Estimation and mental math	4.1A,B,C; 4.4A,G	154
Multiplication		4/E
Vocabulary of multiplication	4.1A,B,C; 4.4B,D,H	155
Related to addition/division	4.1A,B,C; 4.4D	156
Basic facts and fact strategies	4.1A,B,C; 4.4D	157
Properties	4.1A,B,C; 4.4D	158
By a 1-digit number	4.1A,B,C; 4.4D	159
By multiples of 10 or more	4.1A,B,C; 4.4B,D	160
By a multi-digit number	4.1A,B,C; 4.4D	161
Estimation and mental math	4.1A,B,C; 4.4D,G	162
Division		4/E
Vocabulary of division	4.1A,B,C; 4.4E,F	163
Related to subtraction/multiplication	4.1A,B,C; 4.4E,F	164
Basic facts and fact strategies	4.1A,B,C; 4.4E,F	165
By a 1-digit divisor	4.1A,B,C; 4.4E,F	166
By multiples of 10 and 100	4.1A,B,C; 4.4E,F	167
By a multi-digit divisor	4.1A,B,C; 4.4E,F	168,169
Estimation and mental math	4.1A,B,C; 4.4E,F,H	170