

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	K/A
Missing numbers and number sentences		
Order of Operations		
Multiple steps (see Mathematical Process)		
Number line		
- whole numbers	K.2B,E,F	38-42
Exponents and powers		
Scientific Notation		
- positive powers of 10		
- negative power of 10		
Squares and square roots		
Operations		K/A
Variables		
Writing equations		
Integers (Negative/Positive)		
- define		
- compare/order		
- addition/subtraction		
- multiplication/division		
Solve 1 step equations		
- addition/subtraction		
- multiplication/division		
- input/output table		

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		K/A
Pictographs	K.2A,B,E; K.9B,C	43-47
Bar graphs	K.9	48-52
Line graphs		
Line plots		
Double line graphs		
Circle graphs		
Stem and leaf diagrams		
Box diagrams (Box And Whisker)		
Scatter plots		
Collection		K/A
Tally charts		

Tally chart and frequency distribution		
Range, mode, median, mean		
Sampling		
Probability		K/A
Predicting outcomes		
Probabilities	K.1G,F	53-56

DECIMALS

Concepts		K/A
Meaning of decimals		
Compare/order		
Related to fractions		
Related to percent		
Related to money		
Place value		
Rounding		
Operations		K/A
Addition		
Subtraction		
Multiplication		
Division		
- whole number divisor		
- decimal divisor		
- repeating decimals/terminating decimals		
Estimating		

FRACTIONS

Concepts		K/A
Part of a whole/part of a set	K.2C,D,E,G,I	57-60
Lowest terms/simplest form		

Comparing and ordering		
Rounding/estimating		
Related to decimals		
Related to percent		
Least Common Denominator (LCD)		
Equivalent fractions		
Mixed numbers		
- related to improper fractions		
Operations		K/A
Addition		
- like denominators		
- unlike denominators		
- mixed numbers		
Subtraction		
- like denominators		
- unlike denominators		
- mixed numbers		
- regrouping		
- mixed numbers with regrouping		
Multiplication		
- simple fractions		
- mixed numbers		
- simplifying		
Division		
- reciprocal		
- whole numbers		
- mixed numbers		
- solve equations		
FUNCTIONS		
Relationships		K/A
Tables		

Ordered pairs		
Line graphs (See Data Interpretation)		
Venn Diagrams		
Graphing equations		
GEOMETRY		
Concepts		K/A
Segments/rays		
Angles		
- classify		
- measuring		
- complementary/supplementary		
- vertical/corresponding/alternative interior		
Lines		
- parallel		
- perpendicular		
- parallel & perpendicular		
- symmetry		
- skew		
Congruence		
Sides, corners, vertices, edges	K.6C,D	61-69
Transformations (slides, turns, flips)	K.7A	70-72
Solid Shapes (sphere, cone, cylinder, cube, pyramid, prism)		K/A
Identify	K.6A,B,C,D	73-75
Sorting and Classifying	K.6E;K.7B	76-78
Plane Shapes		K/A
Open and closed		
Polygons (quadrilaterals, square, pentagon, hexagon, octagon)		
Triangles		
- classify		

- congruent		
Parallelogram		
Diagonals		
Demensional Shapes		K/A
Recognize by given specifications		
Pythagorean Theorem		
MATHEMATICAL PROCESS		
Problem Solving		K/A
Choose an operation	K.1A,B,C	79-83
Multiple-step problems		
Using Estimation		
Make an organized list	K.1D,E,F,G	84-88
Make a table		
Information - too much/too little		
Reasoning		K/A
Sequencing	K.5	89-93
Classifying	K.1E;K.5;K.6E;K.8A	94-98
Compare/contrast	K.2E,G,H	99-103
Generalizations	K.1A,B;K.8A	104-108
Drawing conclusions	K.1B;K.8C	109-113
Visual patterns (See Funtions)	K.1C;K.2B,C,D,E,G,I;K.3A,B	164-168
Reasoning	K.1B;K.8B	114-118
Computation Strategies		K/A

multiply/divide by multiples and powers of 10		
MEASUREMENT		
Length		K/A
Nonstandard units	K.7	119-122
Standard units		
Metric		
Capacity		K/A
Nonstandard units	K.7	123-126
Standard units		
Metric		
Weight		K/A
Nonstandard units	K.7	127-130
Standard units		
Metric		
Converting Metrics		
Reasoning		K/A
Fahrenheit		
Celsius		
Convert		
Area - Volume		K/A
Perimeter		
Area		
Volume		
Surface Area		
Circumference		
Circumference - Diameter/radius		
Time		K/A
Elapsed		

Clock	K.1C,F	131-134
Calendar	K.1C,F	135-138
Time zones		
Money		K/A
Identify coins	K.4	139-143
Identify value	K.4	145-147
Making change		
Value comparison	K.9	148-151
NUMBER THEORY		
Number Sense		K/A
Counting	K.2A,C,D	152-155
Place value	K.2A,C,D	156-159
Integers		
Greater than - less than	K.2E,F	160-163
Even and odd numbers		
Prime and composite numbers		
Prime factorizaion		
Divisibility		
Factors and greatest common factors		
Multiples and least common multiples		
Ratio and Proportion		K/A
Ratios		
Equal ratios		
Rate and unit price		
Percent		K/A
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		K/A
With objects/geometric figures	K.1C;K.2B,C,D,E,G,IK.;3A,B	164-168
With numbers		
Skip counting		
Patterns		K/A
Meaning of numbers	K.2A,B	17-37
Reading and writing numbers	K.2A,B;K.5	7-16,169
Ordinal numbers	K.2A,B;K.5	170-179
Roman Numerals		
Estimation		K/A
Using front-end digits		
Rounding whole numbers/decimals		
Rounding fractions/mixed numbers		
Compatible numbers		
Clustering		

TECHNOLOGY

Calculator		K/A
Whole number operation		
Decimals/money		
Fractions		
Percent		

WHOLE NUMBERS

Addition		K/A
-----------------	--	------------

Vocabulary of addition	K.3B	180-184
Related to subtraction		
Fact families		
Basic facts and fact strategies	K.3B	185-189
Properties		
Three or more addends		
Adding 2-digit numbers		
- regrouping		
Adding 3-digit numbers		
- regrouping		
Adding with 4 or more digits		
- regrouping		
Estimation and mental math		
Subtraction		K/A
Vocabulary of subtraction	K.3B	190-195
Related to addition		
Basic facts and fact strategies	K.3B	196-200
Subtracting 2-digit numbers	K.3B	199-200
- regrouping	K.3B	
- with zeros		
Subtracting 3-digit numbers		
- regrouping		
- with zeros		
Subtracting with 4 or more digits		
- regrouping		
- with zeros		
Estimation and mental math		
Multiplication		K/A
Vocabulary of multiplication		
Related to addition/division		
Basic facts and fact strategies		

Properties		
By a 1-digit number		
By multiples of 10 or more		
By a multi-digit number		
Estimation and mental math		
Division		K/A
Vocabulary of division		
Related to subtraction/multiplication		
Basic facts and fact strategies		
By a 1-digit divisor		
By multiples of 10 and 100		
By a multi-digit divisor		
Estimation and mental math		