

ESU 13
Mathematics Achievement Level Test Goals
Revised

- 1. Number** M(4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5, 8.1.1, 8.1.2, 8.1.3, 8.1.4, 8.1.5, 12.1.1, 12.1.2)
 - a. Describe subsets of real numbers: 4.1.2, 8.1.1, 12.1.1
 - b. Ordering and comparing ($<$, $>$, $=$): 4.1.3, 8.1.2, 12.1.1
 - c. Place value: 4.1.1, 8.2.5
 - d. Fraction, decimal, percent concepts, and equivalencies: 4.1.2, 8.1.2, 12.1.1
 - e. Positive and negative integers/numbers: 4.1.4, 8.1.1
 - f. Money (value, counting, computation), count change: 4.1.5
 - g. Expanded, exponential, scientific notation, roots, radicals: 4.1.2, 8.1.3, 12.1.2
 - h. Number theory (prime and composite, factors and multiples, divisibility, powers, properties, absolute value): 8.1.4, 12.1.2
 - i. Ratio, proportion: 4.1.3, 8.2.3

- 2. Computation, Including Fractions** M(4.2.1, 4.2.2, 4.2.3, 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 12.2.1, 12.2.2, 12.2.3)
 - a. Addition, subtraction of whole numbers: 4.2.1, 8.2.1, 8.2.2, 8.2.3
 - b. Multiplication, division of whole numbers: 4.2.1, 8.2.1, 8.2.2, 8.2.3
 - c. Addition, subtraction of fractions and decimals: 4.2.2, 4.2.3, 8.2.1
 - d. Multiplication, division of fractions and decimals: 8.2.1
 - e. All operations with ratio, proportion, percents, exponents, scientific notation, absolute value, real number properties, roots: 8.2.3, 12.2.1
 - f. Estimation/rounding: 4.2.1, 4.2.2, 8.2.5, 12.2.3
 - g. Problem solving, application, connections, justify: 4.2.1, 4.2.2, 4.2.3, 8.2.2, 8.2.3, 8.2.4, 12.2.1, 12.2.2
 - h. Order of operations: 8.2.2, 8.2.3, 8.2.4

- 3. Measurement** M(4.3.1, 4.3.2, 4.3.3, 4.3.4, 8.3.1, 8.3.2, 12.3.1, 12.3.2)
 - a. Estimate, measure, calculate metric length, area, perimeter, mass/weight, volume, capacity: 4.3.1, 8.3.1, 12.3.1
 - b. Estimate, measure, calculate standard unit length, area, perimeter, mass/weight, volume, capacity: 4.3.2, 8.3.1, 12.3.1
 - c. Estimate, measure using non-standard units: 4.3.4, 8.3.2
 - d. Read, measure time and temperature: 4.3.1, 4.3.3, 8.3.1
 - e. Decimal concepts with money: 8.3.1
 - f. Conversions within measurement systems: 8.3.2, 12.3.2
 - g. Problems solving, reasoning, applications: 4.3.1, 4.3.2, 8.3.2
 - h. Measuring tools, accuracy and precision (including angles): 8.3.1, 12.3.1

- 4. Geometry/Spatial Concepts** M(4.4.1, 4.4.2, 4.4.3, 8.4.1, 8.4.2, 8.4.3, 8.4.4, 8.4.5, 8.4.6, 12.4.1, 12.4.3, 12.4.4, 12.4.5, 12.4.6, 12.4.7)
- a. Identify, compare, classify, describe dimensional figures and shapes: 4.4.1, 8.4.1, 12.4.3
 - b. Identify, describe points, lines, line segments, rays, angles: 4.4.2, 8.4.1
 - c. Congruence, symmetry, similarity, transformations, Pythagorean theorem, coordinate geometry: 4.4.3, 8.4.2, 8.4.5, 12.4.3, 12.4.4
 - d. Apply formulas for perimeter/circumference, area, volume (with correct units of measure) for geometric figures: 8.4.3, 8.4.4, 12.4.1
 - e. Problem solving, reasoning, applications, geometric modeling: 4.4.3, 8.4.6, 12.4.6, 12.4.7
 - f. Right triangle applications: 12.4.5
- 5. Data Analysis, Probability and Statistical Concepts** M(4.5.1, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 12.5.1, 12.5.2, 12.5.3, 12.5.4, 12.5.5, 12.5.6)
- a. Collect, organize, interpret data in graphs, charts, tables: 4.5.1, 8.5.1, 8.5.2
 - b. Probability, prediction, outcomes: 4.5.1, 8.5.2, 8.5.3, 12.5.3, 12.5.6
 - c. Central tendency, measures of variability, range, frequency, sampling techniques: 4.5.1, 8.5.1, 8.5.3, 8.5.4, 12.5.1, 12.5.4
 - d. Problem solving, reasoning, applications: 4.5.1, 8.5.4, 12.5.1
 - e. Generate, interpret regression equations: 12.5.2
 - f. Interpret, formulate normal distributions: 12.5.5
- 6. Algebraic Concepts** M(4.6.1, 4.6.2, 8.6.1, 8.6.2, 8.6.3, 12.6.1, 12.6.2, 12.6.3, 12.6.4)
- a. Solve, simplify expressions, equalities, inequalities, systems of equations: 4.6.1, 8.6.2, 12.6.2, 12.6.3
 - b. Identify, extend patterns: 4.6.2, 8.6.3, 12.6.4
 - c. Use variables to describe patterns and write number sentences: 4.6.1, 8.6.3
 - d. Coordinate systems, relations, functions: 8.6.1, 12.6.1
 - e. Order of operations/properties (associative, commutative, distributive): 8.6.2
 - f. Solve polynomials: 12.6.2

Scottsbluff ESU #13 -Aligned Goals	RIT Reference Chart Goals	NWEA Learning Continuum Goals
Subject: Mathematics		
1. Number	1. Number Sense	2. Number Sense and Numeration
2. computation, Including Fractions	2. Estimation and Computation	1. Computation
3. Measurement	5. Measurement	4. Measurement
4. geometry/Spatial Concepts	4. Geometry and Spatial Sense	3. Geometry
5. Data Analysis, Probability, and Statistical Concepts	6. Data Analysis, Statistics, and Probability	5. Statistics, Probability, and Graphing
6. Algebraic Concepts	3. Patterns, Functions, and Algebra	6. Algebraic Concepts
(Integrated Problem Solving-Goals 1-6)	7. Problem Solving, Reasoning	7. Problem Solving