

Oregon Grade-Level Standards Correlated to Merit Software Math Programs

Elementary School

Objective	Expectations	Merit Software
COMPUTATION AND ESTIMATION	<ul style="list-style-type: none"> • Develop and evaluate strategies for multiplying and dividing whole numbers and adding and subtracting fractions with like denominators. • Apply with fluency efficient strategies for determining multiplication and division facts 0-9. • Multiply a three-digit number by a one-digit number. • Divide a three-digit number by a one-digit number with or without remainders. • Determine the meaning of whole number remainders in a problem situation. • Add and subtract commonly used fractions with like denominators (halves, 	<p>Word Problem Shape-Up</p> <p>Fraction Shape-Up</p>

	thirds, fourths, eighths, tenths) and decimals to hundredths.	
ALGEBRAIC RELATIONSHIPS	<ul style="list-style-type: none"> • Use letters, boxes, or other symbols to stand for an unknown quantity in expressions or equations. • Represent the idea of a variable as an unknown quantity using a letter or symbol. • Represent and evaluate algebraic expressions involving a single variable • Identify and represent whole number data on a coordinate graph 	<p>Word Problem Shape-Up</p> <p>Pre-Algebra Shape-Up</p>

Middle School

Objective	Expectations	Merit Software
NUMBERS	<ul style="list-style-type: none"> • Model and compare rational numbers with an emphasis on integers. • Express numbers greater than one in scientific and standard notation. • Use rates, ratios, and percents to solve problems. • Locate rational numbers (with an emphasis on integers) on a number line. • Interpret, model, and 	<p>Word Problem Shape-Up</p> <p>Pre-Algebra Shape-Up</p>

	<p>use percents greater than 100 and less than 1 to solve problems.</p> <ul style="list-style-type: none"> • Determine the prime factorization of a number less than 1000 and express the prime factorization using exponents when applicable. • Use factors (including greatest common factor of two or more numbers), multiples (including least common multiple of two or more numbers), prime factorization, and relatively prime numbers to solve problems. 	
<p>Algebraic Relationships</p>	<ul style="list-style-type: none"> • Represent and solve equations of the form $ax+b=c$ or $k(ax + b) = c$. • Approximate solutions of systems of linear equations from a graph. • Recognize and generate equivalent symbolic forms for algebraic expressions with an emphasis on linear relationships. • Evaluate algebraic expressions and formulas, including expressions involving exponents and parentheses, by substituting rational 	<p>Word Problem Shape-Up</p> <p>Pre-Algebra Shape-Up</p> <p>Algebra Shape-Up</p>

	<p>numbers.</p> <ul style="list-style-type: none">• Translate between and interpret linear relationships represented by words, symbols, tables, and graphs.• Determine the slope and x- and y-intercepts given the graph of a linear equation.• Graph a linear equation given the slope and an initial value (y intercept).• Recognize and graph the solutions of linear inequalities on a number line.• Identify and describe the effects of changing the slope or y-intercept	
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