

Montana Standards for Mathematics Correlated to Merit Software Math Programs

ELEMENTARY SCHOOL MATH

CONTENT STANDARD	STUDENT LEARNING EXPECTATIONS	MERIT SOFTWARE
Standard 1: Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connection and applications, and using appropriate	1. Communicate Mathematical Ideas in a variety of ways	Word Problem Shape-Up
Standard 3: Students use algebraic concepts, processes and language to model and solve a variety of real world and mathematical problems.	<ol style="list-style-type: none"> 1. Explore the use of variables and open sentences to express relationships. 2. Use inverse operations and other strategies to solve numerical sentences. 	Fraction Shape-Up

MIDDLE SCHOOL MATH

CONTENT STANDARD	STUDENT LEARNING EXPECTATIONS	MERIT SOFTWARE
Standard 1: Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connection and applications, and using appropriate strategies.	<ol style="list-style-type: none"> 1. Formulate and solve multi-step and non-routine problems using a variety of strategies. 2. Generalize methods to new problem situations. 3. select and apply appropriate estimation strategies throughout the problem-solving process. 4. Select and use appropriate technology to enhance mathematical understanding. Appropriate technology may include, but is not limited to, paper and pencil, calculator, computer, and data collection devices. 	Pre-Algebra Shape-Up Basic Algebra Shape-Up Word Problem Shape-Up

<p>Standard 2: Students demonstrate understanding of and an ability to use numbers and operations.</p>	<ol style="list-style-type: none"> 1. Use the four basic operations with whole numbers, fractions, decimals, and integers. 2. Use mental mathematics and number sense in using order of operations, and order relations for whole numbers, fractions, decimals, and integers. 3. Use the relationships and applications of ratio, proportion, percent, and scientific notation. 4. Develop and apply number theory concepts (e.g., primes, factors and multiples) in real world and mathematical problem situations. 	<p>Pre-Algebra Shape-Up</p> <p>Fraction Shape-Up</p> <p>Basic Algebra Shape-Up</p> <p>Word Problem Shape-Up</p>
<p>Standard 3: Students use algebraic concepts, processes and language to model and solve a variety of real world and mathematical problems.</p>	<ol style="list-style-type: none"> 1. Use the four basic operations with whole numbers, fractions, decimals, and integers. 2. Use mental mathematics and number sense in using order of operations, and order relations for whole numbers, fractions, decimals, and integers. 3. Use the relationships and applications of ratio, proportion, percent, and scientific notation. 4. Develop and apply number theory concepts e.g., primes, factors and multiples) in real world and mathematical problem situations. 	<p>Pre-Algebra Shape-Up</p> <p>Fraction Shape-Up</p> <p>Basic Algebra Shape-Up</p> <p>Word Problem Shape-Up</p>