

Optimum Resource Inc.'s MiddleWare Software

Michigan Standards - Fourth Grade Mathematics	Math Word Problems
Patterns, Relationships and Functions	
Patterns	
<i>Student recognize similarities & generalized patterns, use patterns to create models & make predictions, describe the nature of patterns & relationships, & construct representations of mathematical relationships</i>	✓
Variability and Change	
<i>Students describe the relationships among variables, predict what will happen to one variable as another variable is changed, & compare patterns of change</i>	✓
GEOMETRY AND MEASUREMENT	
Shapes & Shape Relationships	
<i>Students develop spatial sense, identify characteristics & define shapes, identify properties & describe relationships among shapes</i>	
Position	
<i>Students identify locations of objects, identify location relative to other objects, & describe the effects transformations on an object</i>	

Optimum Resource Inc.'s MiddleWare Software

Michigan Standards - Fourth Grade Mathematics	Math Word Problems
Measurement	
<i>Students compare attributes of two objects, or of one object with a standard (unit), & analyze situations to determine what measurement(s) should be made & to what level of precision</i>	
DATA ANALYSIS AND STATISTICS	
Collection, Organization & Presentation of Data	
<i>Students collect & explore data, organize data into a useful form, & develop skill in representing & reading data displayed in different formats</i>	
Description & Interpretation	
<i>Students examine data & describe characteristics of a distribution, relate data to the situation from which they arose, & use data to answer questions convincingly and persuasively</i>	
Inference and Prediction	
<i>Students draw defensible inferences about unknown outcomes, make predictions, & identify the degree of confidence they have in their predictions</i>	

Optimum Resource Inc.'s MiddleWare Software

Michigan Standards - Fourth Grade Mathematics	Math Word Problems
NUMBER SENSE AND NUMERATION	
Concepts and Properties of Numbers	
<i>Students experience counting and measuring activities to develop intuitive sense about numbers, develop understanding about properties of numbers, understand the need for & existence of different sets of numbers, & investigate properties of special numbers</i>	✓
Representation and Uses of Numbers	
<i>Students recognize that numbers are used in different ways such as counting, measuring, ordering and estimating, understand & produce multiple representations of a number, & translate among equivalent representations</i>	✓
Number Relationships	
<i>Students investigate relationships such as equality, inequality, inverses, factors & multiples, & represent & compare very large & very small numbers</i>	✓
NUMERICAL & ALGEBRAIC OPERATIONS & ANALYTICAL THINKING	
Operations and Their Properties	
<i>Students understand & use various types of operations to solve problems</i>	✓

Optimum Resource Inc.'s MiddleWare Software

<p>Michigan Standards - Fourth Grade Mathematics</p>	<p>Math Word Problems</p>
<p>Algebraic and Analytic Thinking</p>	
<p><i>Students analyze problems to determine an appropriate process for solution, & use algebraic notations to model or represent problems</i></p>	
<p>PROBABILITY AND DISCRETE MATHEMATICS</p>	
<p>Probability</p>	
<p><i>Students develop an understanding of the notion of certainty & of probability as a measure of the degree of likelihood that can be assigned to a given event based on the knowledge available, & make critical judgments about claims that are made in probabilistic situations</i></p>	
<p><i>Students investigate practice situations such as scheduling, routing, sequencing, networking, organizing & classifying, and analyze ideas like recurrence relations, induction, iteration</i></p>	