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

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Michigan Standards - Eighth Grade Mathematics	**Math Word Problems**
DATA ANALYSIS AND STATISTICS	
Collection, Organization & Presentation of Data	
Students collect & explore data, organize data into a useful form, & develop skill in representing & reading data displayed in different formats	
Description & Interpretation	
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	
Inference and Prediction	
Students draw defensible inferences about unknown outcomes, make predictions, & identify the degree of confidence they have in their predictions	
NUMBER SENSE AND NUMERATION	
Concepts and Properties of Numbers	
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	✓

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Michigan Standards - Eighth Grade Mathematics	**Math Word Problems**
Representation and Uses of Numbers	
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	✓
Number Relationships	
Students investigate relationships such as equality, inequality, inverses, factors & multiples, & represent & compare very large & very small numbers	
Operations and Their Properties	
Students understand & use various types of operations to solve problems	✓
Algebraic and Analytic Thinking *Students analyze problems to determine an appropriate process for solution, & use algebraic notations to model or represent problems*	
PROBABILITY AND DISCRETE MATHEMATICS	
Probability	
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	
Students investigate practice situations such as scheduling, routing, sequencing, networking, organizing & classifying, and analyze ideas like recurrence relations, inductions, iteration	