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<b>Grade</b>	5	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	5,C,13: Metric & Customary Measurement
<b>Standard</b>	Data, Probability and Statistics	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0506.5.2	17LG: Rounding: Mixed Practice
<b>Grade/Course Level Expectation</b>		72MC: Measurement
<b>Checks for Understanding</b>		138SB: Math Strategies 4-6
<b>State Performance Indicators</b>	Make predictions based on various data representations, including double bar and line graphs.	
<b>Detail</b>		

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<b>Grade</b>	5	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	5,C,22: Determining Mean
<b>Standard</b>	Data, Probability and Statistics	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0506.5.3	138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Calculate measures of central tendency to analyze data.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,40: Standard & Expanded Number Forms
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	67MC: Number Sense
<b>Code</b>	GLE 0606.1.1		
<b>Grade/Course Level Expectation</b>	Use mathematical language, symbols, and definitions while developing mathematical reasoning.		
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>			
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,26: Addition: Word Problems 6,C,27: Subtraction: Word Problems 6,C,28: Multiplication: Word Problems 6,C,29: Division: Word Problems 6,C,31: Basic Operations 6,C,37: Determining Reasonable Solutions 6,C,47: Problem-Solving Strategies 6,C,51: Logic Problems
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	138SB: Math Strategies 4-6 7LG: Rounding: Mixed Practice 8SB: Fractions: Beginning 10LG: Decimals: Mixed Practice 17LG: Rounding: Mixed Practice 64LG: Whole Numbers: Mixed Practice 65LG: Fractions: Mixed Practice 67MC: Number Sense 68MC: Basic Operations and Order of Operations 6SB: Whole Numbers: Advanced 92SB_A: Decimals: Advanced 70MC: Graphing and Managing Data
<b>Code</b>	GLE 0606.1.2		
<b>Grade/Course Level Expectation</b>	Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.		
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>			
<b>Detail</b>			

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** GLE 0606.1.3  
**Grade/Course Level Expectation** Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.  
**Checks for Understanding**  
**State Performance Indicators**  
**Detail**

**General Skill(s)**  
 This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.  
**Skill Tree(s)**  
 Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** GLE 0606.1.4  
**Grade/Course Level Expectation** Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.  
**Checks for Understanding**  
**State Performance Indicators**  
**Detail**

**General Skill(s)**  
 6,C,26: Addition: Word Problems  
 6,C,27: Subtraction: Word Problems  
 6,C,28: Multiplication: Word Problems  
 6,C,29: Division: Word Problems  
 6,C,31: Basic Operations  
 6,C,37: Determining Reasonable Solutions  
 6,C,47: Problem-Solving Strategies  
 6,C,51: Logic Problems  
**Skill Tree(s)**  
 138SB: Math Strategies 4-6  
 7LG: Rounding: Mixed Practice  
 8SB: Fractions: Beginning  
 10LG: Decimals: Mixed Practice  
 17LG: Rounding: Mixed Practice  
 64LG: Whole Numbers: Mixed Practice  
 65LG: Fractions: Mixed Practice  
 67MC: Number Sense  
 68MC: Basic Operations and Order of Operations  
 6SB: Whole Numbers: Advanced  
 92SB\_A: Decimals: Advanced  
 70MC: Graphing and Managing Data

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,26: Addition: Word Problems
<b>Standard</b>	Mathematical Processes	6,C,27: Subtraction: Word Problems
<b>Code</b>	GLE 0606.1.5	6,C,28: Multiplication: Word Problems
<b>Grade/Course Level Expectation</b>	Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.	6,C,29: Division: Word Problems
<b>Checks for Understanding</b>		6,C,31: Basic Operations
<b>State Performance Indicators</b>		6,C,37: Determining Reasonable Solutions
<b>Detail</b>		6,C,47: Problem-Solving Strategies
		6,C,51: Logic Problems
		<b>Skill Tree(s)</b>
		138SB: Math Strategies 4-6
		7LG: Rounding: Mixed Practice
		8SB: Fractions: Beginning
		10LG: Decimals: Mixed Practice
		17LG: Rounding: Mixed Practice
		64LG: Whole Numbers: Mixed Practice
		65LG: Fractions: Mixed Practice
		67MC: Number Sense
		68MC: Basic Operations and Order of Operations
		6SB: Whole Numbers: Advanced
		92SB_A: Decimals: Advanced
		70MC: Graphing and Managing Data

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,26: Addition: Word Problems
<b>Standard</b>	Mathematical Processes	6,C,27: Subtraction: Word Problems
<b>Code</b>	GLE 0606.1.6	6,C,28: Multiplication: Word Problems
<b>Grade/Course Level Expectation</b>	Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.	6,C,29: Division: Word Problems
<b>Checks for Understanding</b>		6,C,31: Basic Operations
<b>State Performance Indicators</b>		6,C,37: Determining Reasonable Solutions
<b>Detail</b>		6,C,47: Problem-Solving Strategies
		6,C,51: Logic Problems
		<b>Skill Tree(s)</b>
		138SB: Math Strategies 4-6
		7LG: Rounding: Mixed Practice
		8SB: Fractions: Beginning
		10LG: Decimals: Mixed Practice
		17LG: Rounding: Mixed Practice
		64LG: Whole Numbers: Mixed Practice
		65LG: Fractions: Mixed Practice
		67MC: Number Sense
		68MC: Basic Operations and Order of Operations
		6SB: Whole Numbers: Advanced
		92SB_A: Decimals: Advanced
		70MC: Graphing and Managing Data

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** GLE 0606.1.7  
**Grade/Course Level Expectation** Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** GLE 0606.1.8  
**Grade/Course Level Expectation** Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.1  
**Grade/Course Level Expectation** Recognize different conventions used in calculator and computer spreadsheets (e.g., \* for multiplication, ^ for exponent), but use mathematical notation in written work.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.2  
**Grade/Course Level Expectation** Recognize when an estimate is more appropriate than an exact answer in a variety of problem situations.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
6,C,30: Estimation I  
6,C,43: Estimation II

**Skill Tree(s)**  
7LG: Rounding: Mixed Practice  
138SB: Math Strategies 4-6  
17LG: Math Word Problems: Intermediate

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.3  
**Grade/Course Level Expectation** Recognize errors generated by rounding.  
**Checks for Understanding**  
  
**State Performance Indicators**  
  
**Detail**

**General Skill(s)**  
6,C,2: Round Numbers  
  
**Skill Tree(s)**  
7LG: Rounding: Mixed Practice  
67MC: Number Sense

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.4  
**Grade/Course Level Expectation** Describe how changes in one quantity or variable result in changes in another.  
**Checks for Understanding**  
  
**State Performance Indicators**  
  
**Detail**

**General Skill(s)**  
6,C,10: Linear Equations  
6,C,35: Algebraic Solution Sentences  
  
**Skill Tree(s)**  
73MC: Algebra, Patterning, and Logic  
138SB: Math Strategies 4-6

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,7: Algebraic Expressions
<b>Standard</b>	Mathematical Processes	6,C,100: Properties of Addition*
<b>Code</b>	0606.1.5	6,C,101: Properties of Multiplication*
<b>Grade/Course Level Expectation</b>	Illustrate properties of operations by showing that two expressions are equivalent in a given context (e. g., using an area model for distributive property, and grouping/set models for commutative and associative properties).	<b>Skill Tree(s)</b>
<b>Checks for Understanding</b>		6SB: Whole Numbers: Advanced
<b>State Performance Indicators</b>		64LG: Whole Numbers: Mixed Practice
<b>Detail</b>		68MC: Basic Operations and Order of Operations
		84MC: Fraction Concepts

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,160: Probability Concepts*
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>
<b>Code</b>	0606.1.6	71MC: Probability
<b>Grade/Course Level Expectation</b>	Model situations by devising and carrying out experiments and simulations.	
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>
<b>Code</b>	0606.1.7	70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>	Formulate questions, design studies, and collect real world data.	
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>
<b>Code</b>	0606.1.8	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
<b>Grade/Course Level Expectation</b>	Determine an appropriate sample to test an hypothesis.	
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.9  
**Grade/Course Level Expectation** Use age-appropriate books, stories, and videos to convey ideas of mathematics.  
**Checks for Understanding**  
  
**State Performance Indicators**  
  
**Detail**

**General Skill(s)**  
6,C,47: Problem-Solving Strategies  
**Skill Tree(s)**  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Mathematical Processes  
**Code** 0606.1.10  
**Grade/Course Level Expectation** Use various methods (such as dynamic geometry software) to explore properties of triangles and quadrilaterals.  
**Checks for Understanding**  
  
**State Performance Indicators**  
  
**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.  
**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

# Orchard Correlation to the Tennessee Curriculum Standards



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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,7: Algebraic Expressions
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	
<b>Code</b>	0606.1.11		68MC: Basic Operations and Order of Operations 84MC: Fraction Concepts
<b>Grade/Course Level Expectation</b>	Model algebraic expressions with manipulatives, technology, and pencil and paper.		
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>			
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	
<b>Code</b>	SPI 0606.1.1		70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>	Make conjectures and predictions based on data.		
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,37: Determining Reasonable Solutions
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	138SB: Math Strategies 4-6
<b>Code</b>	SPI 0606.1.2		
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>	Judge the reasonableness of the results of rational number estimates and/or computations.		
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,10: Linear Equations 6,C,24: Interpreting Graphs 6,C,26: Addition: Word Problems 6,C,27: Subtraction: Word Problems 6,C,28: Multiplication: Word Problems 6,C,29: Division: Word Problems 6,C,31: Basic Operations 6,C,36: Graphs, Charts, & Data Management 6,C,48: Interpreting Data
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes	<b>Skill Tree(s)</b>	6SB: Whole Numbers: Advanced 7LG: Rounding: Mixed Practice 8SB: Fractions: Beginning 10LG: Decimals: Mixed Practice 17LG: Rounding: Mixed Practice 64LG: Whole Numbers: Mixed Practice 65LG: Fractions: Mixed Practice 67MC: Number Sense 68MC: Basic Operations and Order of Operations 70MC: Graphing and Managing Data 73MC: Algebra, Patterning, and Logic 92SB_A: Decimals: Advanced 138SB: Math Strategies 4-6
<b>Code</b>	SPI 0606.1.3		
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>	Use concrete, pictorial, and symbolic representation for integers.		
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,7: Algebraic Expressions 6,C,100: Properties of Addition* 6,C,101: Properties of Multiplication*
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes		
<b>Code</b>	SPI 0606.1.4		
<b>Grade/Course Level Expectation</b>		<b>Skill Tree(s)</b>	6SB: Whole Numbers: Advanced 64LG: Whole Numbers: Mixed Practice 68MC: Basic Operations and Order of Operations 84MC: Fraction Concepts
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>	Select the representation that models one of the arithmetic properties (commutative, associative, or distributive).		
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,7: Algebraic Expressions 6,C,35: Algebraic Solution Sentences
<b>Subject</b>	Mathematics		
<b>Standard</b>	Mathematical Processes		
<b>Code</b>	SPI 0606.1.5		
<b>Grade/Course Level Expectation</b>		<b>Skill Tree(s)</b>	68MC: Basic Operations and Order of Operations 73MC: Algebra, Patterning, and Logic 84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>	Model algebraic expressions using algebra tiles.		
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,42: Multiplication 6,C,46: Division
<b>Subject</b>	Mathematics		
<b>Standard</b>	Number & Operations		
<b>Code</b>	GLE 0606.2.1	<b>Skill Tree(s)</b>	6SB: Whole Numbers: Advanced 10LG: Decimals: Mixed Practice 64LG: Whole Numbers: Mixed Practice 65LG: Fractions: Mixed Practice 68MC: Basic Operations and Order of Operations 84MC: Fraction Concepts 92SB_A: Decimals: Advanced
<b>Grade/Course Level Expectation</b>	Understand and explain the procedures for multiplication and division of fractions, mixed numbers, and decimals.		
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>			
<b>Detail</b>			

<b>Grade</b>	6	<b>General Skill(s)</b>	6,C,104: Fraction & Decimal Relationships* 6,C,106: Comparing & Ordering Decimals*
<b>Subject</b>	Mathematics		
<b>Standard</b>	Number & Operations		
<b>Code</b>	GLE 0606.2.2	<b>Skill Tree(s)</b>	67MC: Number Sense 71MC: Probability 72MC: Measurement 84MC: Fraction Concepts
<b>Grade/Course Level Expectation</b>	Solve multi-step mathematical, contextual and verbal problems using fractions, mixed numbers, and decimals.		
<b>Checks for Understanding</b>			
<b>State Performance Indicators</b>			
<b>Detail</b>			

# Orchard Correlation to the Tennessee Curriculum Standards



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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios 6,C,22: Fractional Probability
<b>Standard</b>	Number & Operations	
<b>Code</b>	GLE 0606.2.3	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>	Understand and use ratios, rates and percents.	84MC: Fraction Concepts 138SB: Math Strategies 4-6 71MC: Probability
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,104: Fraction & Decimal Relationships* 6,C,106: Comparing & Ordering Decimals*
<b>Standard</b>	Number & Operations	
<b>Code</b>	GLE 0606.2.4	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>	Understand and convert between fraction, decimal, and percent forms of rational numbers.	67MC: Number Sense 71MC: Probability 72MC: Measurement 84MC: Fraction Concepts
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** GLE 0606.2.5  
**Grade/Course Level Expectation** Develop meaning for integers; represent and compare quantities with integers.  
**Checks for Understanding**

**General Skill(s)**  
6,C,104: Fraction & Decimal Relationships\*  
6,C,106: Comparing & Ordering Decimals\*

**Skill Tree(s)**  
67MC: Number Sense  
71MC: Probability  
72MC: Measurement  
84MC: Fraction Concepts

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.1  
**Grade/Course Level Expectation**  
**Checks for Understanding** Efficiently compare and order fractions, decimals and percents; determine their approximate locations on a number line.

**General Skill(s)**  
6,C,12: Number Lines

**Skill Tree(s)**  
84MC: Fraction Concepts  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.2  
**Grade/Course Level Expectation**  
**Checks for Understanding** Use area models to represent multiplication of fractions.

**General Skill(s)**  
6,C,42: Multiplication  
**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
10LG: Decimals: Mixed Practice  
64LG: Whole Numbers: Mixed Practice  
65LG: Fractions: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts  
92SB\_A: Decimals: Advanced

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.3  
**Grade/Course Level Expectation**  
**Checks for Understanding** Create and solve contextual problems that lead naturally to division of fractions.

**General Skill(s)**  
6,C,46: Division  
**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
10LG: Decimals: Mixed Practice  
64LG: Whole Numbers: Mixed Practice  
65LG: Fractions: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts 92SB\_A: Decimals: Advanced

**State Performance Indicators**

**Detail**

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios
<b>Standard</b>	Number & Operations	<b>Skill Tree(s)</b>
<b>Code</b>	0606.2.4	84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Understand ratio as a fraction used to compare two quantities by division.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios
<b>Standard</b>	Number & Operations	<b>Skill Tree(s)</b>
<b>Code</b>	0606.2.5	84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Recognize a:b, a/b, and “a to b” as notations for ratios.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios
<b>Standard</b>	Number & Operations	<b>Skill Tree(s)</b>
<b>Code</b>	0606.2.6	84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Recognize common percentages as ratios based on fractions whose denominators are 2, 3, 4, 5, or 10.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios
<b>Standard</b>	Number & Operations	<b>Skill Tree(s)</b>
<b>Code</b>	0606.2.7	84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Connect ratio and rate to multiplication and division.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.8  
**Grade/Course Level Expectation**  
**Checks for Understanding** Recognize that a terminating decimal equals a fraction with a denominator that is a power of ten.

**General Skill(s)**  
6,C,104: Fraction & Decimal Relationships\*  
6,C,106: Comparing & Ordering Decimals\*

**Skill Tree(s)**  
67MC: Number Sense  
71MC: Probability  
72MC: Measurement  
84MC: Fraction Concepts

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.9  
**Grade/Course Level Expectation**  
**Checks for Understanding** Recognize that the decimal form of a rational number either terminates or repeats.

**General Skill(s)**  
6,C,104: Fraction & Decimal Relationships\*  
6,C,106: Comparing & Ordering Decimals\*

**Skill Tree(s)**  
67MC: Number Sense  
71MC: Probability  
72MC: Measurement  
84MC: Fraction Concepts

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** 0606.2.10  
**Grade/Course Level Expectation**  
**Checks for Understanding** Explore contexts that can be described with negative numbers (such as money, elevation, and temperature).  
**State Performance Indicators**  
**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.  
**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Number & Operations  
**Code** SPI 0606.2.1  
**Grade/Course Level Expectation**  
**Checks for Understanding**  
**State Performance Indicators** Solve problems involving the multiplication and division of fractions.  
**Detail**

**General Skill(s)**  
6,C,42: Multiplication  
6,C,46: Division  
**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
10LG: Decimals: Mixed Practice  
64LG: Whole Numbers: Mixed Practice  
65LG: Fractions: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts  
92SB\_A: Decimals: Advanced

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,26: Addition: Word Problems
<b>Standard</b>	Number & Operations	6,C,27: Subtraction: Word Problems
<b>Code</b>	SPI 0606.2.2	6,C,28: Multiplication: Word Problems
<b>Grade/Course Level Expectation</b>		6,C,29: Division: Word Problems
<b>Checks for Understanding</b>		6,C,47: Problem-Solving Strategies
<b>State Performance Indicators</b>	Solve problems involving the addition, subtraction, multiplication, and division of mixed numbers.	<b>Skill Tree(s)</b>
<b>Detail</b>		6SB: Whole Numbers: Advanced
		7LG: Rounding: Mixed Practice
		8SB: Fractions: Beginning
		10LG: Decimals: Mixed Practice
		17LG: Rounding: Mixed Practice
		64LG: Whole Numbers: Mixed Practice
		65LG: Fractions: Mixed Practice
		67MC: Number Sense
		68MC: Basic Operations and Order of Operations
		92SB_A: Decimals: Advanced
		138SB: Math Strategies 4-6

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,26: Addition: Word Problems
<b>Standard</b>	Number & Operations	6,C,27: Subtraction: Word Problems
<b>Code</b>	SPI 0606.2.3	6,C,28: Multiplication: Word Problems
<b>Grade/Course Level Expectation</b>		6,C,29: Division: Word Problems
<b>Checks for Understanding</b>		6,C,47: Problem-Solving Strategies
<b>State Performance Indicators</b>	Solve problems involving the addition, subtraction, multiplication, and division of decimals.	<b>Skill Tree(s)</b>
<b>Detail</b>		6SB: Whole Numbers: Advanced
		7LG: Rounding: Mixed Practice
		8SB: Fractions: Beginning
		10LG: Decimals: Mixed Practice
		17LG: Rounding: Mixed Practice
		64LG: Whole Numbers: Mixed Practice
		65LG: Fractions: Mixed Practice
		67MC: Number Sense
		68MC: Basic Operations and Order of Operations
		92SB_A: Decimals: Advanced
		138SB: Math Strategies 4-6

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,26: Addition: Word Problems
<b>Standard</b>	Number & Operations	6,C,27: Subtraction: Word Problems
<b>Code</b>	SPI 0606.2.4	6,C,28: Multiplication: Word Problems
<b>Grade/Course Level Expectation</b>		6,C,29: Division: Word Problems
<b>Checks for Understanding</b>		6,C,47: Problem-Solving Strategies
<b>State Performance Indicators</b>	Solve multi-step arithmetic problems using fractions, mixed numbers, and decimals.	<b>Skill Tree(s)</b>
<b>Detail</b>		6SB: Whole Numbers: Advanced
		7LG: Rounding: Mixed Practice
		8SB: Fractions: Beginning
		10LG: Decimals: Mixed Practice
		17LG: Rounding: Mixed Practice
		64LG: Whole Numbers: Mixed Practice
		65LG: Fractions: Mixed Practice
		67MC: Number Sense
		68MC: Basic Operations and Order of Operations
		92SB_A: Decimals: Advanced
		138SB: Math Strategies 4-6

<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,3: Renaming Fractions
<b>Standard</b>	Number & Operations	6,C,104: Fraction & Decimal Relationships*
<b>Code</b>	SPI 0606.2.5	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		71MC: Probability
<b>Checks for Understanding</b>		72MC: Measurement
<b>State Performance Indicators</b>	Transform numbers from one form to another (fractions, decimals, percents, and mixed numbers).	84MC: Fraction Concepts
<b>Detail</b>		138SB: Math Strategies 4-6

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,9: Ratios 6,C,120: Ratio/Percent Concepts*
<b>Standard</b>	Number & Operations	
<b>Code</b>	SPI 0606.2.6	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		71MC: Probability 84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Solve problems involving ratios, rates and percents.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,12: Number Lines
<b>Standard</b>	Number & Operations	
<b>Code</b>	SPI 0606.2.7	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Locate positive rational numbers on the number line.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,12: Number Lines
<b>Standard</b>	Number & Operations	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.2.8	84MC: Fraction Concepts 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Locate integers on the number line.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,31: Basic Operations
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	GLE 0606.3.1	17LG: Math Word Problems: Intermediate 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>	Write and solve two-step equations and inequalities.	
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** GLE 0606.3.2  
**Grade/Course Level Expectation** Interpret and represent algebraic relationships with variables in expressions, simple equations and inequalities.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
6,C,31: Basic Operations

**Skill Tree(s)**  
17LG: Math Word Problems: Intermediate  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** GLE 0606.3.3  
**Grade/Course Level Expectation** Extend order of operations to include grouping symbols and exponents.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
6,C,31: Basic Operations

**Skill Tree(s)**  
17LG: Math Word Problems: Intermediate  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** GLE 0606.3.4  
**Grade/Course Level Expectation** Use expressions, equations and formulas to solve problems.  
**Checks for Understanding**

**General Skill(s)**  
6,C,7: Algebraic Expressions  
6,C,102: Expressions\*

**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
17LG: Math Word Problems: Intermediate  
64LG: Whole Numbers: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** GLE 0606.3.5  
**Grade/Course Level Expectation** Use multiple representations including symbolic algebra to model and/or solve contextual problems that involve linear relationships.  
**Checks for Understanding**

**General Skill(s)**  
6,C,7: Algebraic Expressions  
6,C,100: Properties of Addition\*  
6,C,101: Properties of Multiplication\*

**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
64LG: Whole Numbers: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** GLE 0606.3.6  
**Grade/Course Level Expectation** Understand and use the Cartesian coordinate system.  
**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**

This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**

Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.1  
**Grade/Course Level Expectation**  
**Checks for Understanding** Write and solve two-step linear equations corresponding to given situations (non-negative numbers only).

**State Performance Indicators**

**Detail**

**General Skill(s)**

This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**

Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.2

**General Skill(s)**  
6,C,31: Basic Operations  
**Skill Tree(s)**  
17LG: Math Word Problems: Intermediate  
138SB: Math Strategies 4-6

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Write and solve one-step inequalities corresponding to given situations (non-negative numbers only).

**State  
Performance  
Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.3

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Grade/Course  
Level  
Expectation**

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Checks  
for  
Understanding** Recognize the use of juxtaposition (such as  $3x$ ,  $ab$ ) to stand for multiplication, and the convention in these cases of writing numbers before letters.

**State  
Performance  
Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.4  
**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Generate data and graph relationships concerning measurement of length, area, volume, weight, time, temperature, money, and information.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,107: Models & Displays of Data\*  
6,C,36: Graphs, Charts, & Data Management

**Skill Tree(s)**  
70MC: Graphing and Managing Data  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.5  
**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Use the commutative, associative and distributive properties to show that two expressions are equivalent.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,7: Algebraic Expressions  
6,C,100: Properties of Addition\*  
6,C,101: Properties of Multiplication\*

**Skill Tree(s)**  
6SB: Whole Numbers: Advanced  
64LG: Whole Numbers: Mixed Practice  
68MC: Basic Operations and Order of Operations  
84MC: Fraction Concepts

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.6

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Use equations to describe simple relationships shown in a table or graph.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,24: Interpreting Graphs

**Skill Tree(s)**  
70MC: Graphing and Managing Data  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.7

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Move fluently between different representations (such as verbal, tabular, numerical, algebraic, and graphical) of equations and expressions.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.8  
**Grade/Course Level Expectation**  
**Checks for Understanding** Represent patterns using words, graphs, and simple symbolic notation.

**General Skill(s)**  
6,C,24: Interpreting Graphs  
6,C,36: Graphs, Charts, & Data Management  
6,C,48: Interpreting Data

**Skill Tree(s)**  
70MC: Graphing and Managing Data  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** 0606.3.9  
**Grade/Course Level Expectation**  
**Checks for Understanding** Write a contextual story modeled by a given graph.

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**State Performance Indicators**

**Detail**

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,11: Ordered Pairs
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	0606.3.10	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Understand that in an ordered pair $(x, y)$ , the $x$ represents horizontal location and $y$ represents vertical location.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,11: Ordered Pairs
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	0606.3.11	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Identify the quadrant of the coordinate system in which a point lies.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** SPI 0606.3.1

**General Skill(s)**  
6,C,12: Number Lines  
**Skill Tree(s)**  
84MC: Fraction Concepts  
138SB: Math Strategies 4-6

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding**

**State  
Performance  
Indicators** Represent on a number line the solution of a linear inequality.

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** SPI 0606.3.2

**General Skill(s)**  
6,C,114: Order of Operations\*  
**Skill Tree(s)**  
68MC: Basic Operations and Order of Operations

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding**

**State  
Performance  
Indicators** Use order of operations and parentheses to simplify expressions and solve problems.

**Detail**

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,113: Beginning Algebra Concepts*
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.3.3	73MC: Algebra, Patterning, and Logic
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Write equations that correspond to given situations or represent a given mathematical relationship.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,7: Algebraic Expressions 6,C,102: Expressions*
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.3.4	6SB: Whole Numbers: Advanced 17LG: Math Word Problems: Intermediate 64LG: Whole Numbers: Mixed Practice 68MC: Basic Operations and Order of Operations 84MC: Fraction Concepts
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Rewrite expressions to represent quantities in different ways.	
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** SPI 0606.3.5  
**Grade/Course Level Expectation**  
**Checks for Understanding**

**State Performance Indicators** Translate between verbal expressions/sentences and algebraic expressions/equations.

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** SPI 0606.3.6  
**Grade/Course Level Expectation**  
**Checks for Understanding**

**State Performance Indicators** Solve two-step linear equations using number sense, properties, and inverse operations.

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,7: Algebraic Expressions
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.3.7	68MC: Basic Operations and Order of Operations 84MC: Fraction Concepts
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Use algebraic expressions and properties to analyze numeric and geometric patterns.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,107: Models & Displays of Data* 6,C,36: Graphs, Charts, & Data Management
<b>Standard</b>	Algebra	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.3.8	70MC: Graphing and Managing Data 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Select the qualitative graph that models a contextual situation (e.g., water filling then draining from a bathtub).	
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Algebra  
**Code** SPI 0606.3.9

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding**

**State  
Performance  
Indicators** Graph ordered pairs of integers in all four quadrants  
of the Cartesian coordinate system.

**Detail**

**General Skill(s)**  
6,C,4: Exponents & Notation  
6,C,11: Ordered Pairs

**Skill Tree(s)**  
69MC: Geometry and Spatial Sense  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Geometry & Measurement  
**Code** GLE 0606.4.1

**Grade/Course  
Level  
Expectation** Understand and use basic properties of triangles,  
quadrilaterals, and other polygons.

**Checks  
for  
Understanding**

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,13: Geometry I: 2-D & 3-D Figures  
6,C,14: Transformations

**Skill Tree(s)**  
69MC: Geometry and Spatial Sense

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,15: Similar, Congruent, & Symmetrical Figures I 6,C,33: Similar, Congruent, & Symmetrical Figures II
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	GLE 0606.4.2	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>	Use the concepts of translation, rotation, reflection, and symmetry to understand congruence in the plane.	69MC: Geometry and Spatial Sense
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,19: Perimeter & Circumference 6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	GLE 0606.4.3	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>	Develop and use formulas to determine the circumference and area of circles, and the area of trapezoids, and develop strategies to find the area of composite shapes.	69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures 6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	GLE 0606.4.4	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>	Develop and use formulas for surface area and volume of 3-dimensional figures.	69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,121: Angles*
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	0606.4.1	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		69MC: Geometry and Spatial Sense
<b>Checks for Understanding</b>	Investigate the sum of the angles in a triangle and a quadrilateral using various methods.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,121: Angles*
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.2	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Relate the sum of the angles in a triangle to the sum of the angles in polygons.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.3	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Verify the basic properties of triangles and quadrilaterals using a protractor and ruler.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,121: Angles*
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.4	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Classify triangles by side lengths (scalene, isosceles, and equilateral) and angle measure (acute, right, obtuse, isosceles and equiangular).	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.5	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Model and use the Triangle Inequality Theorem.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,121: Angles*
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.6	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Use the properties of interior and exterior angles of polygons to solve problems.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,14: Transformations
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.7	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Work with transformations in a plane and explore their meanings through drawings and manipulatives.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Geometry & Measurement  
**Code** 0606.4.8  
**Grade/Course Level Expectation**  
**Checks for Understanding** Understand scaling, dilation and their relation to similarity.

**State Performance Indicators**

**Detail**

**General Skill(s)**

This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**

Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Geometry & Measurement  
**Code** 0606.4.9  
**Grade/Course Level Expectation**  
**Checks for Understanding** Analyze the differences between congruence and similarity.

**State Performance Indicators**

**Detail**

**General Skill(s)**

6,C,15: Similar, Congruent, & Symmetrical Figures I  
6,C,33: Similar, Congruent, & Symmetrical Figures II

**Skill Tree(s)**

69MC: Geometry and Spatial Sense

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures 6,C,14: Transformations
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	0606.4.10	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		69MC: Geometry and Spatial Sense
<b>Checks for Understanding</b>	Describe the effect of a transformation on a 2-dimensional figure and the resulting symmetry.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,19: Perimeter & Circumference
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	0606.4.11	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>	Relate the circumference of a circle with the perimeter of a polygonal figure.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Geometry & Measurement  
**Code** 0606.4.12  
**Grade/Course Level Expectation**  
**Checks for Understanding** Derive the meaning of Pi using concrete models and/or appropriate technology.

**State Performance Indicators**

**Detail**

**General Skill(s)**

This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**

Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

**Grade** 6  
**Subject** Mathematics  
**Standard** Geometry & Measurement  
**Code** 0606.4.13  
**Grade/Course Level Expectation**  
**Checks for Understanding** Understand the relationships among the radius, diameter, circumference and area of a circle, and that the ratio of the circumference to the diameter is the same as the ratio of the area to the square of the radius, and that this ratio is called Pi.

**State Performance Indicators**

**Detail**

**General Skill(s)**

This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**

Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.14	72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Relate the area of a trapezoid to the area of a parallelogram.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.15	72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Find lengths given areas or volumes, and vice versa.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures 6,C,14: Transformations
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	0606.4.16	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		69MC: Geometry and Spatial Sense
<b>Checks for Understanding</b>	Solve contextual problems involving area and circumference of circles, surface areas and volumes of prisms, pyramids, cones, and cylinders.	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures 6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	
<b>Code</b>	0606.4.17	<b>Skill Tree(s)</b>
<b>Grade/Course Level Expectation</b>		69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Checks for Understanding</b>	Use manipulatives to discover the volume of a pyramid is one-third the volume of the related prism (the heights and base areas are equal).	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures 6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	0606.4.18	69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>	Use manipulatives to discover the volume of a cone is one-third the volume of the related cylinder (the heights and base areas are equal).	
<b>State Performance Indicators</b>		
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,13: Geometry I: 2-D & 3-D Figures
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.1	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Identify, define or describe geometric shapes given a visual representation or a written description of its properties.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,121: Angles*
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.2	69MC: Geometry and Spatial Sense
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Find a missing angle measure in problems involving interior/exterior angles and/or their sums.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.3	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Solve problems using the Triangle Inequality Theorem.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,19: Perimeter & Circumference 6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.4	69MC: Geometry and Spatial Sense 72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Calculate with circumferences and areas of circles.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.5	72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Determine the surface area and volume of prisms, pyramids and cylinders.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,20: Area & Volume
<b>Standard</b>	Geometry & Measurement	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.4.6	72MC: Measurement 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Given the volume of a cone/pyramid, find the volume of the related cylinder/prism or vice versa.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,22: Fractional Probability 6,C,23: Probability 6,C,34: Probability & Statistics
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>
<b>Code</b>	GLE 0606.5.1	71MC: Probability 138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>	Understand the meaning of probability and how it is expressed.	
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>		
<b>Detail</b>		

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**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** GLE 0606.5.2  
**Grade/Course Level Expectation** Interpret representations of data from surveys and polls, and describe sample bias and how data representations can be misleading.

**Checks for Understanding**

**State Performance Indicators**

**Detail**

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.1  
**Grade/Course Level Expectation**  
**Checks for Understanding** Understand that the probability of an event is a number between zero and one that expresses the likelihood of its occurrence.

**State Performance Indicators**

**Detail**

**General Skill(s)**  
6,C,23: Probability

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

# Orchard Correlation to the Tennessee Curriculum Standards



**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.2

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Identify the probability of an event as the ratio of the number of its actual occurrences to the total number of its possible occurrences.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.3

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Express probabilities in different ways.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

# Orchard Correlation to the Tennessee Curriculum Standards



**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.4  
**Grade/Course Level Expectation**  
**Checks for Understanding** Understand the difference between probability and odds.

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.5  
**Grade/Course Level Expectation**  
**Checks for Understanding** Analyze a situation that involves probability of an independent event.

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

# Orchard Correlation to the Tennessee Curriculum Standards



**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.6  
**Grade/Course Level Expectation**  
**Checks for Understanding** Estimate the probability of simple and compound events through experimentation or simulation.

**General Skill(s)**  
6,C,22: Fractional Probability  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.7  
**Grade/Course Level Expectation**  
**Checks for Understanding** Apply procedures to calculate the probability of complimentary events.

**General Skill(s)**  
6,C,23: Probability  
6,C,34: Probability & Statistics

**Skill Tree(s)**  
71MC: Probability  
138SB: Math Strategies 4-6

**State Performance Indicators**

**Detail**

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.8

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Connect data sets and their graphical representations (such as bar graphs, circle, graphs, and stem-and-leaf plots).

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
6,C,107: Models & Displays of Data\*  
6,C,108: Collecting & Interpreting Data\*

**Skill Tree(s)**  
70MC: Graphing and Managing Data

**Grade** 6  
**Subject** Mathematics  
**Standard** Data Analysis, Statistics, & Probability  
**Code** 0606.5.9

**Grade/Course  
Level  
Expectation**

**Checks  
for  
Understanding** Determine the sample space for a given situation.

**State  
Performance  
Indicators**

**Detail**

**General Skill(s)**  
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

**Skill Tree(s)**  
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

# Orchard Correlation to the Tennessee Curriculum Standards



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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>	
<b>Code</b>	0606.5.10		70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>	Distinguish between a random and nonrandom sample.		
<b>State Performance Indicators</b>			
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,25: Determining Mean
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>	
<b>Code</b>	0606.5.11		138SB: Math Strategies 4-6
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>	Select the appropriate measure of center to describe a data set.		
<b>State Performance Indicators</b>			
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>	
<b>Code</b>	0606.5.12		70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>			
<b>Checks for Understanding</b>	Predict the characteristics of a population based on the analysis of sample data.		
<b>State Performance Indicators</b>			
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>	
<b>Subject</b>	Mathematics		6,C,23: Probability
<b>Standard</b>	Data Analysis, Statistics, & Probability		6,C,34: Probability & Statistics
<b>Code</b>	SPI 0606.5.1	<b>Skill Tree(s)</b>	
<b>Grade/Course Level Expectation</b>			71MC: Probability
<b>Checks for Understanding</b>			138SB: Math Strategies 4-6
<b>State Performance Indicators</b>	Determine the theoretical probability of simple and compound events in familiar contexts.		
<b>Detail</b>			

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.5.2	70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Identify features of graphs that may be misleading.	
<b>Detail</b>		

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<b>Grade</b>	6	<b>General Skill(s)</b>
<b>Subject</b>	Mathematics	6,C,108: Collecting & Interpreting Data*
<b>Standard</b>	Data Analysis, Statistics, & Probability	<b>Skill Tree(s)</b>
<b>Code</b>	SPI 0606.5.3	70MC: Graphing and Data Management
<b>Grade/Course Level Expectation</b>		
<b>Checks for Understanding</b>		
<b>State Performance Indicators</b>	Determine whether or not a sample is biased.	
<b>Detail</b>		

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