

How DIBELS® Math Relates to the Common Core State Standards in Mathematics

© Dynamic Measurement Group, Inc. / May 7, 2014

DIBELS® Math draws problem types from the Common Core State Standards for Mathematics. However, DIBELS Math is a General Outcome Measure (GOM) and not intended to measure every skill on the Standards. For further information on the Common Core State Standards for Mathematics, visit <http://www.corestandards.org/the-standards/mathematics>.

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Kindergarten

Common Core Domain	DIBELS Math Measure
Counting and Cardinality Know number names and the count sequence Count to tell the number of objects Compare Numbers	Next Number Fluency Beginning Quantity Discrimination Beginning Quantity Discrimination
Operations and Algebraic Thinking Understand addition as putting together and adding to, understand subtraction as taking apart and taking from	
Number and Operations in Base Ten Work with numbers 11-19 to gain foundations for place value	
Measurement and Data Describe and compare measurable attributes Classify objects and count the number of objects in each category	Beginning Quantity Discrimination Beginning Quantity Discrimination
Geometry Identify and describe shapes Analyze, compare, create, and compose shapes	
	Number Identification

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

First Grade

Common Core Domain	DIBELS Math Measure
<p>Operations and Algebraic Thinking</p> <p>Represent and solve problems involving addition and subtraction</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction</p> <p>Add and subtract within 20</p> <p>Work with addition and subtraction equations</p>	<p>Computation</p> <p>Computation</p>
<p>Number and Operations in Base Ten</p> <p>Extend the counting sequence</p> <p>Understand place value</p> <p>Use place value understanding and properties of operations to add and subtract</p>	<p>Next Number Fluency, Number Identification</p> <p>Advanced Quantity Discrimination</p> <p>Computation Missing Number Fluency</p>
<p>Measurement and Data</p> <p>Measure lengths indirectly and by iterating length units</p> <p>Tell and write time</p> <p>Represent and interpret data</p>	
<p>Geometry</p> <p>Reason with shapes and their attributes</p>	

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Second Grade

Common Core Domain	DIBELS Math Measure
<p>Operations and Algebraic Thinking</p> <p>Represent and solve problems involving addition and subtraction</p> <p>Add and subtract within 20</p> <p>Work with equal groups of objects to gain foundations for multiplication</p>	<p>Concepts and Applications</p> <p>Computation</p> <p>Concepts and Applications</p>
<p>Number and Operations in Base Ten</p> <p>Understand place value</p> <p>Use place value understanding and properties of operations to add and subtract</p>	<p>Concepts and Applications</p> <p>Computation</p>
<p>Measurement and Data</p> <p>Measure and estimate lengths in standard units</p> <p>Relate addition and subtraction to length</p> <p>Work with time and money</p> <p>Represent and interpret data</p>	<p>Concepts and Applications</p> <p>Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Geometry</p> <p>Reason with shapes and their attributes</p>	<p>Concepts and Applications</p>

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Third Grade

Common Core Domain	DIBELS Math Measure
<p>Operations and Algebraic Thinking</p> <p>Represent and solve problems involving multiplication and division</p> <p>Understand properties of multiplication and the relationship between multiplication and division</p> <p>Multiply and divide within 100</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic</p>	Concepts and Applications
	Computation Concepts and Applications
	Computation
	Concepts and Applications
<p>Number and Operations in Base Ten</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic</p>	Computation Concepts and Applications
<p>Number and Operations - Fractions</p> <p>Develop understanding of fractions as numbers</p>	Concepts and Applications
<p>Measurement and Data</p> <p>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects</p> <p>Represent and interpret data</p> <p>Geometric measurement: understand concepts of area and relate area to multiplication and to addition</p> <p>Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures</p>	Concepts and Applications
	Concepts and Applications
	Concepts and Applications
	Concepts and Applications
<p>Geometry</p> <p>Reason with shapes and their attributes</p>	
	Concepts and Applications

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Fourth Grade

Common Core Domain	DIBELS Math Measure
<p>Operations and Algebraic Thinking</p> <p>Use the four operations with whole numbers to solve problems</p> <p>Gain familiarity with factors and multiples</p> <p>Generate and analyze patterns</p>	<p>Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Number and Operations in Base Ten</p> <p>Generalize place value understanding for multi-digit whole numbers</p> <p>Use place value understanding and properties of operations to perform multi-digit arithmetic</p>	<p>Concepts and Applications</p> <p>Computation</p>
<p>Number and Operations - Fractions</p> <p>Extend understanding of fraction equivalence and ordering</p> <p>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers</p> <p>Understand decimal notation for fractions, and compare decimal fractions</p>	<p>Concepts and Applications</p> <p>Computation Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Measurement and Data</p> <p>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit</p> <p>Represent and interpret data</p> <p>Geometric measurement: understand concepts of angle and measure angles</p>	<p>Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Geometry</p> <p>Draw and identify lines and angles, and classify shapes by properties of their lines and angles</p>	<p>Concepts and Applications</p>

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Fifth Grade

Common Core Domain	DIBELS Math Measure
Operations and Algebraic Thinking	
Write and interpret numerical expressions	Concepts and Applications
Analyze patterns and relationships	Concepts and Applications
Number and Operations in Base Ten	
Understand the place value system	Concepts and Applications
Perform operations with multi-digit whole numbers and with decimals to hundredths	Computation Concepts and Applications
Number and Operations - Fractions	
Use equivalent fractions as a strategy to add and subtract fractions	Computation Concepts and Applications
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	Concepts and Applications
Measurement and Data	
Convert like measurement units within a given measurement system	Concepts and Applications
Represent and interpret data	
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	Concepts and Applications
Geometry	
Graph points on the coordinate plane to solve real-world and mathematical problems	Concepts and Applications
Classify two-dimensional figures into categories based on their properties	Concepts and Applications

DIBELS® Math Measures Linkage to Common Core State Standards in Mathematics

Sixth Grade

Common Core Domain	DIBELS Math Measure
<p>Ratios and Proportional Relationships</p> <p>Understand ratio concepts and use ratio reasoning to solve problems</p>	<p>Concepts and Applications</p>
<p>The Number System</p> <p>Apply and extend previous understandings of multiplication and division to divide fractions by fractions</p> <p>Compute fluently with multi-digit numbers and find common factors and multiples</p> <p>Apply and extend previous understandings of numbers to the system of rational numbers</p>	<p>Computation Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Expressions and Equations</p> <p>Apply and extend previous understandings of arithmetic to algebraic expressions</p> <p>Reason about and solve one-variable equations and inequalities</p> <p>Represent and analyze quantitative relationships between dependent and independent variables</p>	<p>Concepts and Applications</p> <p>Concepts and Applications</p> <p>Concepts and Applications</p>
<p>Geometry</p> <p>Solve real-world and mathematical problems involving area, surface area, and volume</p>	<p>Concepts and Applications</p>
<p>Statistics and Probability</p> <p>Develop understanding of statistical variability</p> <p>Summarize and describe distributions</p>	<p>Concepts and Applications</p> <p>Concepts and Applications</p>