

## **DesCartes: A Continuum of Learning®**

## **Mathematics**

Goal: Number and Operations

RIT Score Range: 161 - 170 Statements Last Updated: Mar 10, 2014

Skills and Concepts to Enhance (73% Probability*) < 161	Skills and Concepts to Develop (50% Probability*) 161 - 170	Skills and Concepts to Introduce (27% Probability*) 171 - 180
Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality	Understand Place Value, Counting, and Cardinality
<ul> <li>Identifies whole numbers under 100 using base-10 blocks</li> </ul>	Identifies whole numbers under 100 using base-10 blocks	• Identifies whole numbers 100 - 999 using base-10 blocks
Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa)	Identifies the numerical and written name for whole numbers 11 to 20 (e.g., 15 is fifteen, and vice versa)	• Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa)
	Counts 1 to 10 objects     Identifies missing numbers in a series through 100	• Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)
	Recognizes and generates equivalent forms for the same number	<ul> <li>Identifies missing numbers in a series through 100</li> </ul>
	using physical models for whole numbers 11 to 20  • Orders whole numbers less than 10	<ul> <li>Counts backwards from a given number (given number greater than 10)</li> </ul>
	Writes whole numbers in standard and expanded form through the tens	<ul> <li>Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20</li> </ul>
		<ul> <li>Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)</li> </ul>
		Compares whole numbers through 999
		Counts objects that are grouped into tens and ones
		<ul> <li>Identifies the place value and value of each digit in whole numbers through the tens place</li> </ul>
Number and Operations in Base Ten	Number and Operations in Base Ten	Number and Operations in Base Ten
<ul> <li>Uses models to calculate whole number sums through 99</li> </ul>	Uses models to calculate whole number sums through 99	• Uses models to calculate whole number sums through 999
<ul> <li>Adds 1-digit to multiple-digit number with no regrouping</li> </ul>	Adds multiple 1-digit numbers	• Uses strategies for addition facts (e.g., compatible numbers, counting
5 - 1 - 3 - 1 - 3 - 1 - 3 - 1 - 3		
Adds 1-digit to multiple-digit number with regrouping	Uses strategies for addition facts (e.g., compatible numbers, counting	on, doubles, neighbors, making tens)
	on, doubles, neighbors, making tens)	Adds two or three 2-digit number with regrouping
	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> </ul>
	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> <li>Adds 3-digit numbers with no regrouping</li> </ul>
	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> <li>Adds 3-digit numbers with no regrouping</li> <li>Adds 3-digit numbers, with regrouping, with sums under 1000</li> </ul>
	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> <li>Adds 3-digit numbers with no regrouping</li> <li>Adds 3-digit numbers, with regrouping, with sums under 1000</li> <li>Subtracts a 2-digit number from a 2-digit number, with no regrouping</li> </ul>
Adds 1-digit to multiple-digit number with regrouping	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally  • Subtracts a 2-digit number from a 2-digit number, with no regrouping	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> <li>Adds 3-digit numbers with no regrouping</li> <li>Adds 3-digit numbers, with regrouping, with sums under 1000</li> <li>Subtracts a 2-digit number from a 2-digit number, with no regrouping</li> <li>Subtracts 2- and/or 3-digit numbers with no regrouping</li> </ul>
	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally	<ul> <li>Adds two or three 2-digit number with regrouping</li> <li>Adds 1- and/or 2-digit numbers with sums under 100</li> <li>Adds 3-digit numbers with no regrouping</li> <li>Adds 3-digit numbers, with regrouping, with sums under 1000</li> <li>Subtracts a 2-digit number from a 2-digit number, with no regrouping</li> <li>Subtracts 2- and/or 3-digit numbers with no regrouping</li> <li>Number and Operations - Fractions</li> </ul>
Adds 1-digit to multiple-digit number with regrouping	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally  • Subtracts a 2-digit number from a 2-digit number, with no regrouping	Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Number and Operations - Fractions Represents 1/2 with a diagram or model
Adds 1-digit to multiple-digit number with regrouping	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally  • Subtracts a 2-digit number from a 2-digit number, with no regrouping	Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping  Number and Operations - Fractions Represents 1/2 with a diagram or model Represents 1/4 with a diagram or model
Adds 1-digit to multiple-digit number with regrouping	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally  • Subtracts a 2-digit number from a 2-digit number, with no regrouping	Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Number and Operations - Fractions Represents 1/2 with a diagram or model
Adds 1-digit to multiple-digit number with regrouping	on, doubles, neighbors, making tens)  • Adds 1-digit to multiple-digit number with no regrouping  • Adds 1-digit to multiple-digit number with regrouping  • Adds 2-digit numbers with no regrouping  • Subtracts two 1-digit numbers horizontally  • Subtracts a 2-digit number from a 2-digit number, with no regrouping	Adds two or three 2-digit number with regrouping Adds 1- and/or 2-digit numbers with sums under 100 Adds 3-digit numbers with no regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping  Number and Operations - Fractions Represents 1/2 with a diagram or model Represents 1/4 with a diagram or model

## **Explanatory Note**

\* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.

Page