

Grade 3 Mathematics

The grade 3 mathematics assessment presents a variety of items representing the six strands of the Wisconsin Model Academic Standards for Mathematics: Mathematical Processes (*Reasoning, Communication, Connections, Representation, Problem Solving*), Number Operations and Relationships, Geometry, Measurement, Statistics and Probability, and Algebraic Relationships. Assessment items in each category may appear without context and within the context of real-world situations. All test items are either selected-response (multiple-choice) or constructed response format. Some items require the use of mathematical tools including two sets of pattern blocks and a ruler with $\frac{1}{2}$ inch and millimeter intervals. Calculator use is prohibited for all sessions of the test. Students performing at each level draw on a broad range of mathematical knowledge while applying skills and strategies to solve real-world and nonroutine mathematical problems. Each proficiency level presumes mastery at previous levels. *The descriptions provide examples, rather than a complete list, of knowledge and skills students may demonstrate at each level.*

Performance Level	WKCE-CRT Performance Level Descriptions and Scale Score Ranges
Advanced 452 and above	<p>At the beginning of the year, students at the Advanced level demonstrate in-depth understanding of academic knowledge and skills tested on the WKCE-CRT by:</p> <ul style="list-style-type: none"> • using a variety of methods to clearly communicate the step-by-step mathematical strategies and reasoning used to solve problems. • reading and interpreting number lines to solve problems. • estimating involving two- and three-digit addends to solve real-world problems. • determining a fractional part of a set. • using basic geometric terminology to identify and compare attributes of three-dimensional figures. • describing position of a point on a first quadrant coordinate grid using coordinates of letters and numbers. • identifying appropriate units of measurements (US customary and metric). • measuring and comparing objects using non-standard units. • comparing, contrasting and analyzing data from tables, bar graphs, and spinners to draw reasonable conclusions. • identifying and predicting the results of flipping every day objects. • determining the rule used in a function table, number pattern. • using number relationships, students identify a missing number in an equation when the missing number is to the left or the right of the equal sign.. • determining operations and equations to solve real-world problems. • recognizing inverse relationships of addition and subtraction. • solving for variables using the commutative property of addition.

Performance Level	WKCE-CRT Performance Level Descriptions and Scale Score Ranges
Proficient 407 –451	<p>At the beginning of the year, students at the Proficient level demonstrate competency in the academic knowledge and skills tested on the WKCE-CRT by:</p> <ul style="list-style-type: none"> • using specific mathematical language to explain each step used to solve a multi-step problem. • applying place value concepts in two- and three-digit numbers. • solving problems using skip counting of two- and three-digit numbers. • analyzing and evaluating word problems to formulate solutions when working with one-and two-digit numbers involving addition, subtraction or multiplication. • analyzing and evaluating word problems to formulate solutions when working with one- digit numbers involving multiplication. • estimating involving the addition of multiple addends using two- and three-digits. • counting coins up to one dollar and translating pictures of coins into cents and dollars. • predicting the outcome of combining two-dimensional congruent shapes. • measuring real-world objects to the nearest inch or centimeter. • estimating lengths using standard and non-standard units. • determining the area of squares and rectangles when on a grid of square units. • reading and comparing digital and analog clocks to the nearest minute. • extracting information from tables, bar graphs, and simple spinners to draw conclusions and to solve problems. • classifying numbers as even or odd when working with sets of twenty or less objects. • describing the rule to a numeric pattern.
Basic 392 –406	<p>At the beginning of the year, students at the Basic level demonstrate some academic knowledge and skills tested on the WKCE-CRT by:</p> <ul style="list-style-type: none"> • explaining a portion of the steps required to solve a multi-step problem. • using words, numbers or pictures to explain the steps used to find solutions. • adding and subtracting whole numbers in everyday situations. • recognizing numbers represented in word, pictorial and numeric forms. • recognizing fractions in pictorial forms limited to $\frac{1}{2}$. • identifying the number of sides on a two-dimensional figure. • predicting the results of combining two-dimensional shapes. • identifying and naming a point on the first quadrant of a coordinate grid. • choosing the appropriate units of measurement for measuring length when limited to inches, feet, yards, centimeters and meters and for measuring time and temperature. • comparing data in a simple bar graph, table or chart. • using terms less, more, least, and most when working with data.

Performance Level	WKCE-CRT Performance Level Descriptions and Scale Score Ranges
	<ul style="list-style-type: none"> • recognizing and extending missing terms within a numeric pattern. • determining a missing number in a simple equation.
Minimal Performance 391 and below	<p>At the beginning of the year, students at the Minimal level demonstrate very limited academic knowledge and skills tested on the WKCE-CRT by:</p> <ul style="list-style-type: none"> • explaining solutions in brief simple ways. • ordering whole numbers. • identifying place value up to the tens. • using basic skills such as counting to determine a number of items in an array or set. • estimating involving addition and subtraction. • identifying two-dimensional shapes. • identifying the number of vertices (corners) on a two-dimensional shape. • demonstrating movement on a first quadrant coordinate grid. • locating a point on a first quadrant coordinate grid when given the ordered pair (letter, number). • composing two-dimensional shapes from small two-dimensional shapes. • identifying US customary and metric rulers and appropriate units of measure for measuring real-world objects. • estimating length to the nearest unit using non-standard units. • reading pictographs when the key represents one object. • identifying the likelihood of an event involving simple spinners. • extending geometric patterns to the next step. • identifying a missing symbol (+, -, x, =) from a simple equation. • identifying correct equations when the operations are on the right side of the equation.