

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
<b>Standard 1: Number &amp; Operation</b>			
1.1: Understand and use numbers	38-40%	<p>3.M.1.1.1 Read, write, compare, and order whole numbers to 10,000. (287.01.a)</p> <p>CL: B Calc: NO Content Limit: When comparing numbers between 1,000 and 9,999, numbers will differ in only hundreds and thousands places. When comparing, the symbols for greater than and less than will not be used. When ordering, no more than four values are used. Numbers may be ordered least to greatest or greatest to least.</p>	calculator fourth fraction half half dollar multiply ten thousand third
1.1: Understand and use numbers		<p>3.M.1.1.2 Identify place value through 9,999. (287.01.b)</p> <p>CL: B Calc: NO Content Limit: Whole numbers to 9,999.</p>	
1.1: Understand and use numbers		<p>3.M.1.1.3 Count the value of a collection of bills and coins up to \$10.00. (287.01.c)</p> <p>CL: C Calc: NO Content Limit: Pictures of bills and coins should be used. Coins should be close to actual size. Number of coins should be less than the next value coin (i.e., no more than four pennies, one nickel, four dimes, and/or three quarters per item).</p>	
1.1: Understand and use numbers		<p>3.M.1.1.4 Recognize, name, and represent commonly used fractions using concrete materials. (287.01.a)</p> <p>CL: B Calc: NO Content Limit: Fraction denominators limited to 2, 3, 4, 5, 6, 8. Fractions not simplified. No mixed numbers. No improper fractions as correct answer. Pictures of concrete materials should be used.</p>	
1.2: Perform computations accurately		<p>3.M.1.2.2 Add and subtract whole numbers with and without regrouping through 999. (287.02.a)</p> <p>CL: C Calc: NO Content Limit: Each of the two numbers contains at most three digits. Differences must be greater than zero. Expression must be clearly stated. Items may be written in horizontal or vertical form.</p>	
1.2: Perform computations accurately		<p>3.M.1.2.3 Add three one- and two- digit addends. (287.02.c)</p> <p>CL: C Calc: NO Content Limit: Item may contain one- and two-digit numbers. Expression must be clearly stated. Items may be written in horizontal or vertical form.</p>	

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
1.2: Perform computations accurately		<p>3.M.1.2.4 Multiply whole numbers through 10 x 10. (287.02.d)</p> <p>CL: C Calc: NO Content Limit: Whole number factors between 0 and 10 inclusive. Expression must be clearly stated. Items may be written in horizontal or vertical form.</p>	
1.2: Perform computations accurately		<p>3.M.1.2.6 Use appropriate operations to solve word problems and show or explain work. (288.01.b)</p> <p>CL: D Calc: NO Content Limit: Content limits for objectives 1.2.2, 1.2.3, and 1.2.4 apply. Expression should not be stated. Selecting an operation also appropriate for standard. 'Show or explain work' to be assessed in the classroom, not on the ISAT.</p>	
<b>Standard 2: Measurement</b>			
2.1: Understand and use customary and metric measurements	18-20%	<p>3.M.2.1.1 Select and use appropriate units and tools to make formal measurements of length and temperature in both systems. (289.01.a)</p> <p>CL: C Calc: NO Content Limit: Select appropriate units and tools only. Units should be inches, feet, yards, centimeters, meters, and degrees. Tools are rulers, yardsticks, meter sticks, thermometers, clocks, and scales. 'use ... tools to make formal measurements of length and temperature' to be assessed in the classroom, not on the ISAT.</p>	Celsius cup customary degree Fahrenheit gallon liter metric minute minute hand ounce pint pound quart quarter hour ton
2.1: Understand and use customary and metric measurements		<p>3.M.2.1.2 Estimate length, time, and weight in real-world problems using standard units. (289.01.b)</p> <p>CL: C Calc: NO Content Limit: Lengths are measured in inches, feet, and yards. Time is measured in minutes, hours, and days. Weight is measured in ounces, pounds, and tons. Capacity is measured in cups, quarts, and gallons. May select estimate of size from among list of different numbers within same units (e.g., 1 inch, 1 foot, 10 inches, 10 feet).</p>	

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
2.1: Understand and use customary and metric measurements		<p>3.M.2.1.3 Tell time using digital and analog clocks using quarter hour and five minute intervals. (289.01.e)</p> <p>CL: B Calc: NO Content Limit: Second hand not shown on clock face. Picture of analog clock is given and answer options show time on digital clock OR digital clock is shown and answer options are analog clocks.</p>	
2.1: Understand and use customary and metric measurements		<p>3.M.2.1.4 Solve real-world problems related to time.</p> <p>CL: F Calc: NO Content Limit: Times given in hours and minutes. No elapsed time problems. May add or subtract hours and minutes.</p>	
2.1: Understand and use customary and metric measurements		<p>3.M.2.1.5 Identify relationships of length and time within the U.S. customary system and within the metric system. (289.01.c, 289.01.d)</p> <p>CL: C Calc: NO Content Limit: Relationships may include: 12 inches = 1 ft, 3 ft = 1 yard, 100 cm = 1 meter, 60 seconds = 1 min, 60 min = 1 hr. No conversions.</p>	
2.1: Understand and use customary and metric measurements		<p>3.M.2.1.6 State that there are 24 hours in a day, 7 days in a week, and 12 months in a year.</p> <p>CL: B Calc: CN Content Limit: No conversions.</p>	
<b>Standard 3: Algebra &amp; Functions</b>			
3.1: Use algebraic symbolism as a tool to represent mathematical relationships	15-18%	<p>3.M.3.1.1 Write a multiplication problem vertically and horizontally. (290.01.a)</p> <p>CL: C Calc: NO Content Limit: Whole number factors that are one- or two-digit numbers. Student is not required to find the product.</p>	<p>addend equation multiplication rule symbol unknown number</p>
3.1: Use algebraic symbolism as a tool to represent mathematical relationships		<p>3.M.3.1.2 Write a number sentence using simple geometric shapes as symbols to represent an unknown number. (290.01.b)</p> <p>CL: C Calc: NO Content Limit: Information given in words to be rewritten as a number sentence that includes a symbol. Number sentence includes no more than one operation. Geometric symbols used limited to squares, rectangles, or triangles.</p>	

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
3.1: Use algebraic symbolism as a tool to represent mathematical relationships		3.M.3.1.3 Write a fact family when given two addends.  CL: D Calc: NO Content Limit: Whole number addends between 1 and 9, inclusive.	
3.1: Use algebraic symbolism as a tool to represent mathematical relationships		3.M.3.1.4 Read and use symbols (<, >, =) to express relationships with numbers through 9,999. (290.01.c)  CL: C Calc: NO Content Limit: May compare results of expressions. Use whole numbers and expressions with no more than one operation. For addition and subtraction expressions, result may be up to 999. For multiplication, factors must be less than 10.	
3.2: Evaluate algebraic expressions		3.M.3.2.1 Use the commutative property of multiplication. (290.02.a)  CL: C Calc: NO Content Limit: Factors may be one- or two-digit numbers. Student is not required to find the product.	
3.2: Evaluate algebraic expressions		3.M.3.2.2 Solve multiplication problems using the commutative property (e.g., If $24 \times 38 = 912$ , then what is $38 \times 24$ ?).  CL: C Calc: NO Content Limit: Factors may be one- or two-digit numbers. Student is not required to find the product.	
3.3: Solve algebraic equations and inequalities		3.M.3.3.1 Solve missing addend equations. (290.03.a)  CL: C Calc: NO Content Limit: Whole number addends with sums less than 100. Geometric symbols used to represent missing addend limited to squares, rectangles, or triangles.	
3.4: Understand the concept of functions		3.M.3.4.1 Extend a growing arithmetic, numerical pattern when given a rule with a single operation of one digit addition (e.g., add 3). (293.01.a)  CL: C Calc: NO Content Limit: Pattern includes numbers less than 100. Minimum of four terms of pattern must be given.	
<b>Standard 4: Geometry</b>			

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
4.1: Apply concepts of size, shape, and spatial relationships	15-18%	<p>3.M.4.1.1 Identify, compare, and analyze attributes of two- and three- dimensional shapes, including right angles, squares, and three-dimensional shapes in environment, and develop vocabulary to describe the attributes.</p> <p>CL: B, C, D Calc: NO Content Limit: Identify and compare only. Two-dimensional shapes limited to triangles, quadrilaterals (square and rectangle), and circles. Three-dimensional shapes limited to cubes, cones, spheres, cylinders, and pyramids.</p> <p>'Analyze attributes ... and develop vocabulary to describe the attributes' to be assessed in the classroom, not on the ISAT.</p>	<p>flip horizontal right angle slide vertical</p>
4.1: Apply concepts of size, shape, and spatial relationships		<p>3.M.4.1.3 Identify vertical and horizontal lines of symmetry.</p> <p>CL: B Calc: NO Content Limit: Limited to two-dimensional shapes or pictures. May identify no lines of symmetry, one vertical line of symmetry, one horizontal line of symmetry, or both vertical and horizontal lines of symmetry.</p>	
4.3: Apply graphing in two dimensions		<p>3.M.4.3.1 Identify the point of final destination given directions for movement on a positive number line.</p> <p>CL: C Calc: NO Content Limit: Movement described may include sequence of no more than two directions as addition or subtraction. Each successive move must remain in positive portion of number line. Dot must be used to indicate the starting point on given graphic of number line.</p>	
		<b>Standard 5: Data Analysis, Probability, &amp; Stats</b>	
5.1: Understand data analysis	15-18%	<p>3.M.5.1.1 Interpret information found in tables, bar graphs, and charts. (292.01.a)</p> <p>CL: D Calc: NO Content Limit: Total number on tables and bar graphs will not exceed 100. Scales are in increments of 1, 2, or 5. Graphics may have at most four data categories. Bar graphs may be vertical or horizontal. Pictograph may be used as type of bar graph.</p>	prediction

# Third Grade Mathematics

Goal	ISAT%	Objective Description (with content limits)	New Vocabulary Words
5.2 Collect, organize, and display data		<p>3.M.5.2.1 Collect, organize, and display data in tables, charts, or bar graphs in order to answer a question. (292.02.a)</p> <p>CL: C            Calc: NO            Content Limit: Given data, choose a display. Total number on tables and bar graphs will not exceed 100. Scales are in increments of 1, 2, or 5. Graphics may have at most four data categories. Bar graphs may be vertical or horizontal. Pictograph and tally tables may be used as types of bar graphs. 'Collect' to be assessed in the classroom, not on the ISAT.</p>	

Cognitive level codes:
B: Memorize
C: Perform procedures
D: Demonstrate understanding
E: Conjecture, generalize, prove
F: Solve non-routine problems, make connections