

**ISTEP+: Grade 4 Mathematics
2014-15 Blueprint**

Reporting Category	Description	Percent Range*
Number Sense	<p>Strand 1: Number Sense Questions may include understanding equivalent forms of whole numbers up to 1,000,000; comparing two numbers up to 1,000,000; understanding and comparing fractions, whole numbers, mixed numbers and improper fractions; understanding the relationship between decimals and fractions; comparing the size of two decimals to hundredths, understanding factors of whole numbers from 1-100; and rounding any multi-digit whole number to any place within 1,000,000.</p>	12-22%
Computation	<p>Strand 2: Computation Questions may include adding and subtracting fluently; multiplying within 100 fluently; multiplying a 4-digit number by a 1-digit number or two 2-digit numbers; dividing a 4-digit dividend by a 1-digit divisor with remainders; adding and subtracting fractions and mixed numbers with common denominators; and understanding the commutative, associative, and distributive properties.</p>	16-26%
Algebraic Thinking Data Analysis	<p>Strand 3: Algebraic Thinking Questions may include solving real-world addition and subtraction problems; understanding the relationships between the four operations; solving real-world problems involving multiplicative comparison; solving real-world problems involving the addition and subtraction of fractions with common denominators; and understanding how to use simple equations to generate number patterns.</p> <p>Strand 6: Data Analysis Questions may include identifying questions that can be addressed with data; creating scaled graphs and tables; creating line plots with data measures in fractions of a unit; solving addition and subtraction of fraction problems based on data found in line plots; and interpreting data found in circle graphs.</p>	18-28%
Geometry Measurement	<p>Strand 4: Geometry Questions may include identifying, describing, and drawing parallelograms, rhombuses, and trapezoids; recognizing and drawing lines of symmetry; identifying and drawing rays, angles, and parallel and perpendicular lines; and classifying triangles based on attributes.</p> <p>Strand 5: Measurement Questions may include measuring length to eighths of an inch and millimeters; understanding the relative sizes of measures within a measurement system; solving problems involving measurement by using the four operations; solving problems involving the area and perimeter of shapes; and measuring angles in whole number degrees.</p>	20-30%
Mathematical Process	<p>Strand 7: Mathematical Process Questions may include making sense of problems an persevering in solving them; reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling; using appropriate tool strategically; attending to precision; and making use of structure.</p>	9-19%

* This range represents the approximate emphasis for each reporting category on the assessment.