

## ISTEP+: Grade 6 Mathematics 2015-16 Blueprint

*The grade 6 mathematics assessment is divided into five categories for reporting student achievement. Age-appropriate concepts are assessed within each category.*

Reporting Category	Description	Percent Range*
Number Sense and Computation	Questions may include comparing rational numbers solving problems involving absolute value converting among fractions, decimals, and percents, solving problems involving ratios and rates, dividing multi-digit whole numbers fluently, computing with positive fractions and decimals fluently, solving real-world problems involving positive fractions and decimals, evaluating positive rational numbers with whole number exponents, and applying the order of operations and properties of operations to evaluate numerical expressions.	30-40%
Algebra & Functions	Questions may include evaluating expressions for specific values of their variables, applying the properties of operations to create equivalent linear expressions, solving 1-step linear equations fluently, representing real-world problems using linear equations and solving such problems, and solving problems involving points in the coordinate plane.	21-31%
Geometry & Measurement	Questions may include solving problems involving conversions across measurement systems, solving problems involving the sum of the interior angles of triangles and quadrilaterals, solving problems involving area of two-dimensional complex shapes, and solving problems involving volume and surface area of right rectangular prisms.	11-21%
Data Analysis & Statistics	Questions may include creating and interpreting graphical representations of numerical data and summarizing data using measures of center and spread.	4-14%
Mathematical Process	Questions may include making sense of problems and persevering in solving them, reasoning abstractly and quantitatively, constructing viable arguments and critiquing the reasoning of others, modeling, using appropriate tools strategically, attending to precision, and making use of structure.	9-19%

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