

CS1: Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.

The student will be able to:

Grade 6
CS1.1 Apply the appropriate problem solving strategies to solve multi-step and non-routine problems <ul style="list-style-type: none"> ▪ Guess and check ▪ Make tables, charts and lists ▪ Find a pattern ▪ Work backwards ▪ Eliminate unnecessary information ▪ Solve a simpler problem
CS1.2 Estimate using various strategies to determine reasonable answers* <ul style="list-style-type: none"> ▪ Rounding ▪ Mental math
CS1.3 Explain mathematical concepts in written and oral form
CS1.4 Use appropriate mathematical symbols and notations when translating word sentences to number sentences*
CS1.5 Make connections among various mathematical topics*
CS1.6 Apply mathematics in other school subjects and society
CS1.7 Select the appropriate technology to solve problems

*Denotes ITBS skill

CS2: Students demonstrate understanding of and an ability to use numbers and operations.

The student will be able to:

Grade 6
CS2.1 Calculate with fractions and decimals to the ten-thousandths place*
CS2.2 Use order of operations*
CS2.3 Arrange a set of whole numbers, decimals and fractions in numerical order*
CS2.4 Multiply and divide powers of 10*
CS2.5 Solve simple proportions*
CS2.6 Square and cube single digit numbers
CS2.7 Define and distinguish between <ul style="list-style-type: none"> ▪ Factors of whole numbers* ▪ Multiples of whole numbers* ▪ Prime numbers* ▪ Composite numbers* ▪ Square numbers* ▪ Cubed numbers*

*Denotes ITBS skill

CS3: Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.

The student will be able to:

Grade 6
CS3.1 Recognize variables, expressions, exponents, formulas, and equations*
CS3.2 Identify patterns*
CS3.3 Interpret data presented in visual form*
CS3.4 Use one step equations to solve real-world problems*
CS3.5 Recognize associative, commutative, and distributive properties*
CS3.6 Graph whole number and decimal data on a number line

*Denotes ITBS skill

CS4: Students demonstrate understanding of shape and an ability to use geometry.**The student will be able to:**

Grade 6
CS4.1 Identify two and three dimensional models and their relationships (i.e., square and cube)*
CS4.2 Investigate the meaning of the terms* <ul style="list-style-type: none"> ▪ Parallel ▪ Perpendicular ▪ Bisect ▪ Congruent ▪ Obtuse angle ▪ Acute angle ▪ Right angle
CS4.3 Graph ordered pairs*
CS4.4 Determine lines of symmetry in regular polygons
CS4.5 Recognize congruency and transformations of two dimensional figures*
CS4.6 Use appropriate geometric vocabulary when describing the real world
CS4.7 Complete geometric constructions including bisecting angles and lines

*Denotes ITBS skill

CS5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.

The student will be able to:

Grade 6
CS5.1 Estimate and accurately use measurements in both metric (to nearest mm) and standard (to nearest 1/8 inch) systems*
CS5.2 Select and use appropriate units and tools to measure*
CS5.3 Calculate time lapses*
CS5.4 Measure angles to the nearest degree
CS5.5 Identify standard and metric systems of length, mass, volume, weight, and temperature*
CS5.6 Use equivalent measures within each system*
CS5.7 Recognize and solve simple proportions using equivalent fractions*
CS5.8 Use formulas to find the perimeter of triangles, squares and rectangles*
CS5.9 Use formulas to find the area of squares and rectangles*
CS5.10 Use a formula to find circumference

*Denotes ITBS skill

CS6: Students demonstrate understanding of and an ability to use data analysis, probability, and statistics.

The student will be able to:

Grade 6
CS6.1 Collect, organize, and describe a set of data*
CS6.2 Read, interpret, and draw conclusions from bar, line and circle graphs*
CS6.3 Construct line and bar graphs
CS6.4 Compute range, mean, median, and mode*
CS6.5 Draw conclusions from data in graphs*
CS6.6 Make predictions based on probability

*Denotes ITBS skill

CS7: Students demonstrate understanding of and an ability to use patterns, relations and functions.

The student will be able to:

Grade 6
CS7.1 Continue a variety of patterns

*Denotes ITBS skill