

S 1: Students engage in the mathematical process of problem solving and reasoning, estimation, communication, connections and applications, and use appropriate technology.

A student at the proficient level in mathematics will be able to:

K	1	2
CS 1.1: Solve problems from many contexts using a variety of strategies (e.g. estimate, make a table or graph, look for a pattern, and simplify the problem). Explain the methods for solving these problems. <ul style="list-style-type: none"> Explore a variety of problem solving strategies Use of physical materials to make concrete connections 	CS 1.1: Solve problems from many contexts using a variety of strategies (e.g. estimate, make a table, look for a pattern, and simplify the problem). Explain the methods for solving these problems.	CS 1.1: Solve problems from many contexts using a variety of strategies (e.g. estimate, make a table, look for a pattern, and simplify the problem). Explain the methods for solving these problems. <ul style="list-style-type: none"> Use a variety of problem solving strategies

continued

A student at the proficient level in mathematics will be able to:

K	1	2
CS 1.2: Explore estimation strategies throughout the problem-solving process.	CS 1.2: Apply estimation strategies throughout the problem-solving process.	CS 1.2: Apply estimation strategies throughout the problem-solving process. <ul style="list-style-type: none"> Explore for reasonableness of answer Round to nearest 10, 100
CS 1.3: Communicate mathematical ideas in a variety of ways (e.g. written, verbal, concrete, pictorial, graphical). <ul style="list-style-type: none"> Express mathematical ideas using pictures, mathematical vocabulary, language, numbers, and manipulatives 	CS 1.3: Communicate mathematical ideas in a variety of ways (e.g. written, verbal, concrete, pictorial, graphical, and algebraic). <ul style="list-style-type: none"> Read whole number words to ten Understand and use mathematical vocabulary and language Write numerals 0-100 	CS 1.3: Communicate mathematical ideas in a variety of ways (e.g. written, verbal, concrete, pictorial, graphical, and algebraic). <ul style="list-style-type: none"> Understand and use mathematical vocabulary and language

CS 1, continued

A student at the proficient level in mathematics will be able to:

K	1	2
CS 1.4: Recognize and investigate mathematics through applications in real-life situations. <ul style="list-style-type: none"> Relates everyday language to mathematical language and symbols 	CS 1.4: Recognize and investigate mathematics through applications in real- life situations. <ul style="list-style-type: none"> Relate everyday language to mathematical language and symbols 	CS 1.4: Recognize and investigate mathematics through applications in rea- life situations <ul style="list-style-type: none"> Relate everyday language to mathematical language and symbols
CS 1.5: Explore and use appropriate technology to enhance mathematical understanding. Appropriate technology may include, but is not limited to, paper and pencil, calculator, and computer.	CS 1.5: Select and use appropriate technology to enhance mathematical understanding. Appropriate technology may include, but is not limited to, paper and pencil, calculator, and computer.	CS 1.5: Select and use appropriate technology to enhance mathematical understanding. Appropriate technology may include, but is not limited to, paper and pencil, calculator, and computer.

S 2: Students demonstrate understanding of and an ability to use numbers and operations.

A student at the proficient level in mathematics will be able to:

K	1	2
CS 2.1: Exhibit connections between the concrete and symbolic representation of a problem or concept. <ul style="list-style-type: none"> Use concrete objects to illustrate an operation Verbalize a number sentence to describe an operation using concrete materials Represent the numerals 0-12 using concrete objects and written numerals 	CS 2.1: Exhibit connections between the concrete and symbolic representation of a problem or concept. <ul style="list-style-type: none"> Write an equation to connect concrete to symbolic Relate manipulatives, pictures, and diagrams to mathematical concepts 	CS 2.1: Exhibit connections between the concrete and symbolic representation of a problem or concept. <ul style="list-style-type: none"> Write an equation to connect concrete to symbolic Relate manipulatives, pictures tables and diagrams to mathematical concepts

S 2, continued

A student at the proficient level in mathematics will be able to:

K	1	2
CS 2.2: Use the number system by counting, grouping and applying place value concepts. <ul style="list-style-type: none"> Count by 2's to 10 or beyond. Count by 5's and 10's to 100 Count by rote to 50 or beyond Count sets of objects to 12 or beyond using 1:1 correspondence Verbally identify ordinal positions 1st. 	CS 2.2: Use the number system by counting, grouping, and applying place value concepts. <ul style="list-style-type: none"> Read, write, order, and compare numbers to 100 Understand 1:1 correspondence with whole numbers to 20 Compare equivalent and non-equivalent sets using the words: less than, greater than, 1 more, 1 less, equal to 20 	CS 2.2: Use the number system by counting, grouping and applying place value concepts. <ul style="list-style-type: none"> Identify ordinal positions to the 20th place Write an expanded number for any set to two places (to 99) (e.g. 34 = 3 tens, 4 ones or 34 = 30+4) Skip count and write by 2's, 5's, and 10's to 100 Skip count and write by 3's to 30 and 4's to 40 Explore even and odd whole numbers to 100

5 th	<ul style="list-style-type: none"> Compare groups using more/less/same Classifications using size, shape,color, and other attributes. Recognize pennies, nickels, dimes, quarters Explore values of a set of coins 	<ul style="list-style-type: none"> Identify ordinal positions to the 10th place Identify place value to ones and tens Model expanded number for any set to 20 (e.g. 13 = 1 ten, 3 ones, or 13 = 10+3) Count sets of coins to 50¢ using pennies, nickels, dimes and quarters Write money value using correct notation (¢) Skip count and write by 5's and 10's to 100, 2's to 20 Identify even and odd numbers to 20 or beyond. 	<ul style="list-style-type: none"> Count sets of coins to \$1.00 using pennies, nickels, dimes, quarters and half dollars Write money value using correct notation (¢, \$, decimal) Identify bills to \$20 Compare numbers to 99 using greater than, less than and equal to Write numbers before, after, and/or numbers in between Recognize and identifies place value positions for ones, tens and hundreds
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CS 2, continued

A student at the proficient level in mathematics will be able to:

K	1	2
	CS 2.2, continued <ul style="list-style-type: none"> Identify and give value of pennies, nickels, dimes, and quarters Explore the value of a set of coins to \$1.00 	
CS 2.3: Model, explain, and use basic facts, the operations of addition and subtraction of whole numbers, and mental mathematics. <ul style="list-style-type: none"> Explore addition and subtraction facts to 10 with the use of manipulatives Recognize and apply numerical symbols (+, -, =) Identify time to the hour and explore the concept of more or less time 	CS 2.3: Model, explain, and use basic facts, the operations of addition and subtraction of whole numbers, and mental mathematics. <ul style="list-style-type: none"> Demonstrate addition and subtraction facts to 12 Model and explore addition and subtraction of 2-digit whole numbers without regrouping Add 3 one-digit whole numbers (sums to 10) 	CS 2.3: Model, explain, and use basic facts, the operations of addition and subtraction of whole numbers, and mental mathematics. <ul style="list-style-type: none"> Demonstrate knowledge of addition and subtraction facts to 18 Add 3 one-digit numbers to 18 without regrouping Model/add/subtract two 2-digit numbers to 99 with and without regrouping

CS 2, continued

A student at the proficient level in mathematics will be able to:

K	1	2
	CS 2.4: Model and explain part/whole relationships in everyday situations. <ul style="list-style-type: none"> Explore equal parts Demonstrate that a whole can be divided Explore, recognize, and write fractions for 1/4, 1/2 and 1/3. 	CS 2.4: Model and explain part/whole relationships in everyday situations. <ul style="list-style-type: none"> Explore part to whole relationships Recognize equal parts of a whole Identify and write 1/2, 1/3, 1/4 for areas of a whole

CS 2, continued

A student at the proficient level in mathematics will be able to

K	1	2
CS 2.5: Model and explain part/whole relationships in everyday situations. <ul style="list-style-type: none"> Experience equal parts through informal and integrated activities (e.g.: literature, sharing, following directions, etc.) Demonstrate that a whole can be divided Explore equal parts (e.g., two halves equal one whole – the halves are equal) 		

CS 3: Students use algebraic concepts, processes, and language to model and solve a variety of real-world and mathematical problems.

A student at the proficient level in

mathematics will be able to:

K	1	2
CS 3.1: Explore symbols to represent numbers in simple situations. <ul style="list-style-type: none"> Write a numeral to represent the quantity of a set 	CS 3.1: Explore the use of symbols and equations to represent numbers in simple situations.	CS 3.1: Use symbols (e.g., boxes or letters) to represent numbers in simple situations. <ul style="list-style-type: none"> Explore boxes to represent numbers in equations Explore the use of symbols to represent

	CS 3.2: Explore the use of variables and open sentences to express relationships. <ul style="list-style-type: none"> Explore missing addends 	CS 3.2: Explore the use of variables and open sentences to express relationships (e.g., missing addend). <ul style="list-style-type: none"> Solve equations with missing addends and subtrahends Represent mathematical relationships using <ul style="list-style-type: none"> Number line Counters Tables and graphs
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CS3, continued

A student at the proficient level in mathematics will be able to:

K	1	2
	CS 3.3: Use inverse operations and other strategies to solve number sentences. <ul style="list-style-type: none"> Explore the use of inverse operations to solve an addition or subtraction number sentence (facts to 12) Use strategies to solve number sentences (facts to 12) Counting on and back Doubles Doubles plus 1 Fact Families 	CS 3.3: Use inverse operations and other strategies to solve number sentences. <ul style="list-style-type: none"> Model use of inverse operations to solve an addition or subtraction number sentence for facts to 18, (e.g. $18 - __ = 12$, $12 + 6 = 18$) Counting on and back Doubles Doubles plus 1 Fact families (e.g.: $3 + 5 = 8$, $5 + 3 = 8$, $8 - 5 = 3$, $8 - 3 = 5$)

CS 4: Students demonstrate understanding of shapes and an ability to use geometry.

A student at the proficient level

in mathematics will be able to:

K	1	2
CS 4.1: Identify and explore two- and three-dimensional shapes. <ul style="list-style-type: none"> Geometric shapes (e.g. rectangle, square, circle, triangle, cylinder, cube, sphere) 	CS 4.1: Identify, describe, model, and classify two- and three-dimensional shapes. <ul style="list-style-type: none"> Describe attributes of two and three dimensional shapes (e.g. corners and sides) 	CS 4.1: Identify, describe, model, and classify two- and three-dimensional shapes. <ul style="list-style-type: none"> Describe two and three dimensional shapes (e.g. corners, faces, edges and sides)
CS 4.2: Explore lines of symmetry, similar shapes, and positional relationships. <ul style="list-style-type: none"> Sort and classify by size and shape Use and understand position words Boehm (e.g. over, under, between, above, below, etc.) 	CS 4.2: Investigate and predict results of combining, sub-dividing, and changing shapes using manipulatives such as pattern blocks or tangrams.	CS 4.2: Investigate and predict results of combining, subdividing, and changing shapes (e.g. two trapezoids equals one hexagon).

CS4, continued

A student at the proficient level in mathematics will be able to:

K	1	2
	CS 4.3: Identify lines of symmetry, congruent and similar shapes, and positional relationships. <ul style="list-style-type: none"> Identify horizontal and vertical lines of symmetry of two-dimensional shapes Identify congruent and similar shapes Use and understand positional words (e.g. left, right, before, after, and between) 	CS 4.3: Identify lines of symmetry, congruent and similar shapes, and positional relationships. <ul style="list-style-type: none"> Explore, locate and plot ordered pairs on a grid Identify horizontal and vertical lines of symmetry of two-dimensional shapes

Students demonstrate understanding of measurable attributes and an ability to use a measurement

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A student at the proficient level in mathematics will be able to:

K	1	2
CS 5.1: Explore the use of non-standard units (manipulatives such as unifix cubes, beans) to estimate, measure, and compare length and height, weight, capacity, volume, area, and quantity.	CS 5.1: Explore the use of non-standard units (manipulatives such as unifix cubes, beans) to estimate, measure and compare: length, capacity, weight, mass, area, volume, quantity and perimeter.	CS 5.1: Estimate, measure, and investigate non-standard and standard units of : length, height, capacity, weight, mass, area, volume, quantity and perimeter.

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CS5, continued

A student at the proficient level in mathematics will be able to

K	1	2
CS 5.2: Explore measurement skills to everyday situations. <ul style="list-style-type: none"> ▪ Relate time to daily events (morning, afternoon, night, etc.) ▪ Explore an awareness of the days of the week and months of the year ▪ Relate temperature to daily weather (e.g. appropriate dress, activities) 	CS 5.2: Explore the use of non-standard units (manipulatives such as unifix cubes, beans) to measure: <ul style="list-style-type: none"> ▪ Length and height (inch, foot, yard, cm, m) ▪ Temperature (°F) ▪ Weight (pound and kilogram) ▪ Days of week and months of year ▪ Time to the nearest hour and half hour 	CS 5.2: Explore measurement using standard units and non-standard units. <ul style="list-style-type: none"> ▪ Explore measuring capacity using: liters, cups, pints and quarts. ▪ Explore measuring temperature in degrees Fahrenheit and Celsius ▪ Explore time (e.g. 1/2 hour and 1/4 hour, and m/d/y.) ▪ Explore, estimate, and measure length, height, and mass using: centimeters, meter, feet, yard, pound (to nearest lb.), ounces, grams, and kilograms ▪ Centimeters

CS5, continued

A student at the proficient level in mathematics will be able to:

K	1	2
CS 5.3: Explore and use tools and techniques. <ul style="list-style-type: none"> ▪ Time (clock, calendar) ▪ Money (coins) ▪ Length (ruler) ▪ Weight (scale) ▪ Volume (measuring cups) 	CS 5.3: Apply measurement skills to everyday situations. <ul style="list-style-type: none"> ▪ Give today's date in m/d/y 	CS 5.3: Apply measurement skills to everyday situations.
	CS 5.4: Select and use appropriate tools and techniques. <ul style="list-style-type: none"> ▪ Time (clock, calendar) ▪ Money (coins and bills) ▪ Length (ruler, meter stick, yard stick) ▪ Weight (scale) ▪ Volume (cups, pints, quarts, liters and gallons) 	CS 5.4: Select and use appropriate tools and techniques. <ul style="list-style-type: none"> ▪ Time (clock, calendar) ▪ Money (coins and bills) ▪ Length (ruler, meter stick, tape measure, yard stick) ▪ Weight (scale) ▪ Volume (cups, pints, quarts, liters, gallons)

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

A student at the proficient level in mathematics will be able to:

K	1	2
CS 6.1: Participate in collecting, organizing and displaying data	CS 6.1: Participate in collecting, organizing, and displaying data.	CS 6.1: Collect, organize, and display data.
CS 6.2: Explore, construct, read, and interpret data.	CS 6.2: Explore, construct, and interpret data.	CS 6.2: Construct, read and interpret data.
CS 6.3: Participate in solving problems from data.	CS 6.3: Formulate and participate in solving problems that involve collecting and analyzing data (e.g. graphs, tables, and tallies).	CS 6.3: Formulate and solve problems that involve collecting and analyzing data. <ul style="list-style-type: none"> ▪ Conduct surveys and interpret results

CS6, continued

A student at the proficient level in mathematics will be able to:

K	1	2
CS 6.4: Explore simple probability with informal activities (e.g. coin toss).	CS 6.4: Explore simple probability with informal activities (e.g. coin toss).	CS 6.4: Demonstrate and record simple probability through predictions and experimentation.

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

A student at the proficient level in mathematics will be able to:

K	1	2
CS 7.1: Recognize, describe, extend, and create a variety of patterns using colors,	CS 7.1: Recognize, describe, extend, and create a variety of patterns (e.g. numbers, letters,	CS 7.1: Recognize, describe, extend, and create a variety of patterns (e.g. shapes, colors,

shapes, sizes, rhythm, and pictures.	colors, shapes, sizes, pictures and rhythm). ▪ Recognize the same pattern in different forms	numbers, letters, sizes, pictures, rhythm, and operations).
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CS7, cont.

A student at the proficient level in mathematics will be able to:

K	1	2
		CS 7.2: Represent and describe mathematical and real-world relationships.