K-2 Mathematics

High Priority Standards

K	1	2
Numeration A1.1.1 •identify numbers 0-20 •use manipulatives to build sets of numbers 0-10 •rote count numbers to 50	**Numeration** A1.1.1 identify numbers 0-100 and count and write to 100, including "counting on"	**Numeration** A1.1.1 count, group, round-off numbers using the base 10 numeration system
Estimation and Computation A3.1.2 participate in simple addition and subtraction activities using manipulatives	A1.1.3 •use manipulatives/paper and pencil to build basic addition and subtraction facts •state/write addition and subtraction facts without computation	A1.1.2 build numbers from 1 up to 200 on place value board
Functions and Relationships A4.1.1 read, copy, extend, recognize and create AB patterns using a variety of manipulatives	A1.1.5 identify and model simple fractional parts of one: half, quarter, third and whole	A1.1.3 •use manipulatives to solve two-digit addition, including regrouping and single digit subtraction •state/write addition and subtraction fact sums through 20 •subtract and add to hundreds place with no regrouping
Measurement A2.1.1 •participate in activities comparing objects by various measurable attributes (e.g., size, length, weight) •sort and classify objects by different attributes: color, size and shape	A1.1.6 •skip count by 5 and 10 up to 100 •skip count by 2 to 20	A1.1.5 identify, model and label simple fractional parts
Geometry A5.1.1 identify four basic shapes (circle, square, rectangle, triangle)	**Estimation and Computation** A3.1.2 recall and use basic addition and subtraction facts with sums through 10, orally and with paper/pencil	**Estimation and Computation** A3.1.3 add and subtract whole numbers, using a variety of models and algorithms; add and subtract two-digit numbers (regrouping in addition and subtraction); use mental computation
Statistics/Probability A6.1.1 participate in activities to collect, record, organize, display and interpret data	**Functions and Relationships** A4.1.1 recognize, describe, extend and create repeating and increasing patterns with a variety of materials including symbols, objects and manipulatives	A3.1.4 model multiplication as repeated addition
Problem Solving B1.1.1 participate in real-life math situations (e.g. share snack, use recipe)	**Measurement** A2.1.1 •compare and order objects by various measurable attributes (including time, length, weight, and temperature) •name and order the days of the week and months of the year	**Functions and Relationships** A4.1.1 recognize, describe, extend and create repeating and increasing patterns with a variety of materials including symbols, objects, and manipulatives
Communication C1.1.3 participate in activities communicating mathematical problem-solving strategies	A2.1.6 identify coins and currency and their value	**Measurement** A2.1.1 compare and order objects by various measurable attributes (including time, temperature, length, weight, capacity, area and volume)
Connections E1.1.1 participate in activities where mathematical skills are applied to other disciplines (e.g. telling time, music patterns), especially literature	A2.1.2 compare objects to standard and non-standard units to identify objects that are greater than, less than, and equal to a given unit (e.g. inch, foot)	A2.1.5 tell time to the nearest quarter hour
	A2.1.5 tell time to the nearest hour and half hour	A2.1.6 identify coins and currency, their values, and the value of various combinations

	A2.1.6 identify coins and currency and their value	**Geometry** A5.1.1 identify and manipulate plane geometric figures including triangles, circles, squares and rectangles A5.1.2 identify, sort, describe, model and compare solid geometric figures (e.g. cones, spheres, cylinders and cubes) A5.1.4 demonstrate conservation of area (e.g. use manipulatives to show that a square has same area as two right triangles)
	Geometry A5.1.1 identify, sort, describe, model and compare plane geometric figures including triangles, circles, squares and rectangles	
	Statistics/Probability A6.1.1 collect, record, organize, display and explain classification of data A6.1.2 describe and interpret data from a variety of visual displays including tallies, tables, pictographs, Venn diagrams, and concrete and bar graphs	**Statistics/Probability** A6.1.2 describe and interpret data from a variety of visual displays including tallies, tables, pictographs, Venn diagrams, and concrete, line, circle and bar graphs A6.1.5 perform and record simple activities involving probability
	Problem Solving B1.1.1 participate in activities in identifying mathematical questions and/or formulate problems from real-life situations B1.1.2 develop problem-solving strategies including guess and check, make a drawing, find a pattern to solve a variety of problems	**Problem Solving** B1.1.1 participate in activities in identifying mathematical questions and/or formulate problems from practical situations and mathematical activities B1.1.2 apply problem-solving strategies including guess and check, make a drawing, find a pattern to solve a variety of problems
	Communication C1.1.3 use everyday language to explain thinking about mathematical problem-solving strategies and solutions to problems	
	Reasoning D1.1.3 explain why a prediction, an estimation or a solution is reasonable	**Communication** C1.1.3 use everyday language to explain thinking about mathematical problem-solving strategies and solutions to problems
	Connections E1.1.1 apply mathematical skills and processes to other disciplines (e.g. telling time, music patterns), especially literature E1.1.2 use mathematical skills and processes to everyday life	**Reasoning** D1.1.3 explain why a prediction, an estimation or a solution is reasonable **Connections** E1.1.1 apply mathematical skills and processes to other disciplines (e.g. telling time, music patterns), especially literature

Typical Classroom Assessments		
K	**1**	**2**
•anecdotal notes •recorded observations •developmental profiles •individual assessments	•anecdotal notes •recorded observations •data collection •homework •daily work •discussion participation •written explanations of processes •individual & group projects •individual interviews •teacher & commercial tests •timed math facts tests •self-evaluations •conferences with teacher	•math textbook chapter tests and performance assessments •teacher-made tests •class performance •class participation •Mad Math timed math facts tests

Formal School District and State Assessments		
K	**1**	**2**
		• Math Facts Time Tests • Computation Test • Math Standards Inventory • Problem Solving Assessment • Terra Nova

Major Thematic Strands and/or Instructional Units		
K	**1**	**2**
•**Numeration** (Standards A1.1.1 to A1.1.7) •**Estimation and Computation** (Standards A3.1.1 to A3.1.4) •**Functions and Relationships** (Standards A4.1.1 to A4.1.5) •**Measurement** (Standards A2.1.1 to A2.1.6) •**Geometry** (Standards A5.1.1 to A5.1.7) •**Statistics and Probability** (Standards A6.1.1 to A6.1.6) •**Problem Solving** (Standards B1.1.1 to B1.1.3) •**Reasoning** (Standards D1.1.1 to D1.1.3) •**Communication** (Standards C1.2.1 to C1.2.3) •**Connections** (Standards E1.2.1 to E1.2.2)	•**Numeration** (Standards A1.1.1 to A1.1.7) •**Estimation and Computation** (Standards A3.1.1 to A3.1.4) •**Functions and Relationships** (Standards A4.1.1 to A4.1.5) •**Measurement** (Standards A2.1.1 to A2.1.6) •**Geometry** (Standards A5.1.1 to A5.1.7) •**Statistics and Probability** (Standards A6.1.1 to A6.1.6) •**Problem Solving** (Standards B1.1.1 to B1.1.3) •**Reasoning** (Standards D1.1.1 to D1.1.3) •**Communication** (Standards C1.2.1 to C1.2.3) •**Connections** (Standards E1.2.1 to E1.2.2)	•**Numeration** (Standards A1.1.1 to A1.1.7) •**Estimation and Computation** (Standards A3.1.1 to A3.1.4) •**Functions and Relationships** (Standards A4.1.1 to A4.1.5) •**Measurement** (Standards A2.1.1 to A2.1.6) •**Geometry** (Standards A5.1.1 to A5.1.7) •**Statistics and Probability** (Standards A6.1.1 to A6.1.6) •**Problem Solving** (Standards B1.1.1 to B1.1.3) •**Reasoning** (Standards D1.1.1 to D1.1.3) •**Communication** (Standards C1.2.1 to C1.2.3) •**Connections** (Standards E1.2.1 to E1.2.2)

Integration of Technology		
K	**1**	**2**
• use computer technology (e.g. programs) to explore mathematical concepts	• use computer technology (e.g. programs) to explore mathematical concepts	• use computer technology to explore mathematical concepts • use calculators to explore number patterns