Math Kindergarten Chart

M.K.PS **PROBLEM SOLVING**	
PS.1 Explore, examine, and make observations about a social problem or mathematical situation	
PS.2 Interpret information correctly, identify the problem, and generate possible solutions	
PS.3 Act out or model with manipulatives activities involving mathematical content from literature and/or story telling	
PS.4 Formulate problems and solutions from everyday situations (e.g., counting the number of children in the class, using the calendar to teach counting).	
PS.5 Use informal counting strategies to find solutions	
PS.6 Experience teacher-directed questioning process to understand problems	
PS.7 Compare and discuss ideas for solving a problem with teacher and/or students to justify their thinking	
PS.8 Use manipulatives (e.g., tiles, blocks) to model the action in problems	
PS.9 Use drawings/pictures to model the action in problems	
PS.10 Explain to others how a problem was solved, giving strategies	
M.K.RP **REASONING AND PROOF**	
RP.1 Understand that mathematical statements can be true or false	
RP.2 Investigate the use of knowledgeable guessing as a mathematical tools	
RP.3 Explore guesses, using a variety of objects and manipulatives	
RP.4 Listen to claims other students make	
M.K.CM **COMMUNICATION**	
CM.1 Understand how to organize their thought processes with teacher guidance	
CM.2 Share mathematical ideas through the manipulation of objects, drawings, pictures, and verbal explanations	
CM.3 Listen to solutions shared by other students	
CM.4 Formulate mathematically relevant questions with teacher guidance	
CM.5 Use appropriate mathematical terms, vocabulary, and language	
M.K.CN **CONNECTIONS**	
CN.1 Recognize the presence of mathematics in their daily lives	
CN.2 Use counting strategies to solve problems in their daily lives	
CN.3 Recognize and apply mathematics to objects and pictures	
M.K.R **REPRESENTATION**	
R.1 Use multiple representations, including verbal language, acting out or modeling a situation, and drawing pictures as representations	
R.2 Use standard and nonstandard representations	
R.3 Use objects to show and understand physical phenomena (e.g., guess the number of cookies in a package)	
R.4 Use objects to show and understand social phenomena (e.g., count and represent sharing cookies between friends)	
R.5 Use objects to show and understand mathematical phenomena (e.g., draw pictures to show a story problem, show number value using fingers on your hand)	

M.K.N **NUMBER SENSE AND OPERATIONS**	
N.1 Count the items in a collection and know the last counting word tells how many items are in the collection (1 to 10)	
N.2 Count out (produce) a collection of a specified size 1 to 10	
N.3 Numerically label a data set of 1 to 5	
N.4 Verbally count by 1's to 20	
N.5 Verbally count backwards from 10	
N.6 Represent collections with a finger pattern up to 10	
N.7 Draw pictures or other informal symbols to represent a spoken number up to 10	
N.8 Draw pictures or other informal symbols to represent how many in a collection up to 10	
N.9 Write numbers 1-10 to represent a collection	
N.10 Visually determine how many more or less, and then using the verbal counting sequence, match and count 1-10	
N.11 Use and understand verbal ordinal terms, first to tenth	
N.12 Solve and create addition and subtraction verbal word problems (use counting-based strategies, such as counting on and to ten)	
N.13 Determine sums and differences by various means	
M.K.A **ALGEBRA**	
A.1 Use a variety of manipulatives to create patterns using attributes of *and or,* size, or shape	
A.2 Recognize, describe, extend, and create patterns that repeat (e.g., ABABAB or ABAABAAAB)	
M.K.G **GEOMETRY**	
G.1 Describe characteristics and relationships of geometric objects	
G.2 Sort groups of objects by size and size order (increasing and *Relationships* decreasing)	
G.3 Explore vertical and horizontal orientation of objects	
G.4 Manipulate two- and three-dimensional shapes to explore symmetry	
*G.*5 Understand and use ideas such as over, under, above, below, on, beside, next to, and between	
M.K.M **MEASURMENT**	
M.1 Name, discuss, and compare attributes of length (longer than, shorter than)	
M.2 Compare the length of two objects by representing each length with string or a paper strip	
M.3 Relate specific times such as morning, noon, afternoon, and evening to activities and absence or presence of daylight	
M.K.S **STATISTICS AND PROBABILITY**	
S.1 Gather data in response to questions posed by the teacher and students	
S.2 Help to make simple pictographs for quantities up to 10, where one picture represents 1	
S.3 Sort and organize objects by two attributes (e.g., color, size, or shape)	
S.4 Represent data using manipulatives	
S.5 Identify more, less, and same amounts from pictographs or concrete models	