NUMBER SENSE (NS)

Children learn the meaning of numbers in the everyday experiences that adults provide in the home, classroom and in their experiences of God's creation. Preschool children need opportunities to watch, play and interact with adults and other children to learn number vocabulary and to discover number relationships. Developing number sense means more than merely counting. It involves the ability to think and work with numbers easily, to understand their uses and to describe their relationships.

2017	Standard
MA.PK.NS.1	Apply one-to-one correspondence with objects and people and count each object only once.
MA.PK.NS.2	Imitate counting behavior using the names of large numbers.
MA.PK.NS.3	Identify first and last.
MA.PK.NS.4	Use whole numbers and match number symbols with amounts up to 10.
MA.PK.NS.5	Identify when objects are the same number, even if the arrangement is changed.
MA.PK.NS.6	Give "all" objects when asked. Give "some" and give "the rest" when asked.
MA.PK.NS.7	Communicate the meaning of "half".
MA.PK.NS.8	Identify the concept of "none".
MA.PK.NS.9	Rote counts to 10.
MA.PK.NS.10	Identify the next number in a series of numbers up to 10.
MA.PK.NS.11	Count backward from 10.

COMPUTATION (C)

Learning to model, explain and use addition and subtraction concepts in problem solving situations begins with the opportunity for young children to count, sort, compare objects and describe their thinking and observations in everyday situations. In building the foundation for computation, children need opportunities to observe adults and peers applying mathematical concepts and using problem-solving techniques.

2017	Standard
MA.PK.C.1	Trade several smaller items for a larger item.
MA.PK.C.2	Identify and use the concepts of "one more" and "one less".
MA.PK.C.3	Make a collection of items larger by adding items, when asked.
MA.PK.C.4	Make a collection of items smaller by taking away items, when asked.
MA.PK.C.5	Make guesses related to quantity.
MA.PK.C.6	Describe addition situations for numbers less than 5.
MA.PK.C.7	Describe subtraction situations for numbers less than 5.
MA.PK.C.8	Break apart a whole quantity into multiple sets.
MA.PK.C.9	Combine a whole quantity of something.

ALGEBRA AND FUNCTIONS (AF)

Young children build the foundation of finding patterns and their relationships by exploring environments that are rich in shapes, sizes, colors and textures. They learn to identify and describe patterns using mathematical language when there are opportunities to sort, classify and label things in their environment. Children need hands-on activities to explore and describe patterns and relationships involving numbers, shapes, data and graphs in problem-solving.

2017	Standard
MA.PK.AF.1	Follow along and imitate patterns of sound and movement.
MA.PK.AF.2	Reproduce three patterns of sounds and movement.
MA.PK.AF.3	Reproduce simple AB patterns of concrete objects.
MA.PK.AF.4	Predict what comes next when shown a simple AB pattern of concrete objects.
MA.PK.AF.5	Classify categories of objects and name the group of objects.
MA.PK.AF.6	Sort a group of objects by more than one attribute.
MA.PK.AF.7	Communicate when something does not belong or should not happen.

GEOMETRY (G)

Young children need opportunities to explore the size, shape, position and movement of objects within their physical environment. Spatial reasoning begins as children become aware of their bodies and personal space. Children learn to recognize, draw and describe shapes by manipulating, playing with, tracing and making common shapes using real objects in a variety of activities.

2017	Standard
MA.PK.G.1	Give clues for finding hidden objects.
MA.PK.G.2	Discriminate an object that is pulled apart and one that is put together.
MA.PK.G.3	Identify parts of an object.
MA.PK.G.4	Copy vertical and horizontal lines.
MA.PK.G.5	Identify attributes of an object and sort a group of objects by one attribute.
MA.PK.G.6	Use position words, "in" or "out", "on" or "off", "here" or "there", "beside" or "next to" to indicate where things are in
	space. Follow instructions to place an object in the indicated space.
MA.PK.G.7	Identify and copy circles, squares, triangles, and rectangles.

MEASUREMENT (M)

Children need many opportunities to explore and discover measurement and apply the results to real life situations in order to construct concepts of measurement.

2017	Standard
MA.PK.M.1	Follow steps in a routine, such as a daily schedule. Tell what activity comes first and what follows in sequence in a
	three-event sequence.
MA.PK.M.2	Order three objects by size.
MA.PK.M.3	Use any descriptive word or gesture to express amount or size and communicate the size of things in relation to self.
MA.PK.M.4	Use cups and other measuring tools in the correct context.
MA.PK.M.5	Identify when something is hot or cold.
MA.PK.M.6	Sort objects into long and short and use the words to describe what they are doing.
MA.PK.M.7	Identity when something is too heavy to lift.
MA.PK.M.8	Relate time to events. Associate time-related concepts.