

## Early Math Terms & Definitions

Knowledge of how children progress in their early development of math concepts helps caregivers, teachers and parents to select activities that intentionally build upon these skills. Research has shown that children are capable of learning numeracy at a much earlier age than once thought and mastery of these skills is a strong predictor of future academic success.

The skills defined here are important for children to master at a young age. Future math knowledge depends upon a solid foundation in these areas:

**Subitizing** The ability to *instantly* recognize small groups of items without the need to count them. For instance, recognizing five dots on a die and knowing that it is five. With further development, children will begin to “put together” and “take apart” perceptual patterns. For example, children will instantly recognize that the five dots on a die is composed of a set of two dots and a set of three dots, without needing to count the dots. When children subitize, they are employing powerful conceptual thinking that is necessary for more complex math.

**Rote counting** Saying number in a sequence without necessarily attaching meaning to the number words.

**Number sequence** Children must learn both the names of the numerals in the proper order and make sense of the patterns. Ability to count aloud does not mean a child can count a set of objects.

**Tagging** Touching each object while counting. Sometimes children “tag” with their eyes or by nodding their heads without physically touching the items.



**Synchrony** Saying one number name for each object tagged.

**One-to-one correspondence** There is one number for each item and each item is only counted once. A child using one-to-one correspondence is employing synchrony, tagging *and* a strategy for keeping track of objects that have been counted.

**Conservation of number** The understanding that the number of objects remains the same even though they have been rearranged, spread out or moved closer together.

**Cardinality** Knowing the last number counted in a set of objects represents the total number in the set.

