

DOMAIN 4: GENERAL KNOWLEDGE			
SUB-DOMAIN: MATHEMATICS AND NUMERACY			
NUMBER SENSE AND OPERATIONS			
GOAL 39: CHILDREN DEMONSTRATE UNDERSTANDING OF NUMBERS, WAYS OF REPRESENTING NUMBERS, RELATIONSHIPS AMONG NUMBERS, AND NUMBER SYSTEMS.			
Age Range	Developmental Growth	Child Indicators	Caregiver Strategies
6 to 18 Months	Manipulate objects with a variety of attributes and quantities.	<ul style="list-style-type: none"> <li>▪ Notices characteristics of objects (e.g. size, color, shape, or quantity).</li> <li>▪ Use all senses to manipulate objects and people (e.g. selects objects to taste, touch, smell, and listen to sounds).</li> <li>▪ Drops objects; then looks for the object.</li> <li>▪ Begins to use symbols, signs, and utterances to show “more” and “all gone.”</li> <li>▪ Fills and dumps containers with objects.</li> <li>▪ Searches for objects that are out of sight.</li> <li>▪ Shows interest in real-life mathematical concepts (e.g. matching objects, lining up objects, enjoying books with numbers and counting).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Engage child in activities that show “more.”</li> <li>▪ Provide toys and objects that have a variety of sensory attributes.</li> <li>▪ Use number words to label items in daily routines (e.g. counting shoes, toes, or food).</li> <li>▪ Use counting finger-plays, songs, and number rhymes.</li> <li>▪ Provide opportunities for child to fill and dump containers with objects.</li> <li>▪ Tell stories and read books with number words and counting.</li> <li>▪ Provide number/numeral materials in child’s environment (e.g. posters and pictures that include numerals or blocks with numerals on them).</li> <li>▪ Read books that have themes such as big and little, more, all gone, and counting.</li> <li>▪ Sing songs that introduce numbers and encourage the child to sing some of the song (e.g. 3 little ducks, 3 little monkeys).</li> <li>▪ Describe the groups/arrangements of objects that the child places together (e.g. “I see you put more blocks over here.”).</li> <li>▪ Hide objects to be found.</li> </ul>