

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 |
|------------------------|--|---|--|
| 16 to 38 Months | Compare differences between two or more objects, groups of objects, and quantity of objects. | <ul style="list-style-type: none"> ▪ Matches objects by a single characteristic (e.g. size, color, shape, or quantity; puts all the toy cars together). ▪ Sorts objects by a single characteristic (e.g. size, color, shape, or quantity; puts all of the balls in one basket). ▪ Begins to imitate counting, using number words without one to one correspondence, and without order. ▪ Counts rote, saying number words, though not always in the correct order. ▪ Recognizes that a single object is “one” regardless of size, shape, or other attributes. ▪ Imitates counting rhymes or songs such as Five Little Monkeys. ▪ Recognizes small quantities and assigns number, though not always correctly (e.g. sees two blocks and says, “Two”). ▪ Manipulates sets of up to three items. ▪ Uses words to symbolize quantity and comparisons of quantity (e.g. all, some, none, more). ▪ Recognizes basic common relations (sock and shoe go together). | <ul style="list-style-type: none"> ▪ Use quantity concepts in everyday routines (e.g. “Would you like one more or two more pieces?”). ▪ Pair objects during daily activities (e.g. one child gets one spoon at the lunch table). ▪ Provide child with math-related toys and objects for matching, sorting, and counting that are representative of their own and other cultural backgrounds. ▪ Model using math in daily activities (e.g. count children who want milk). ▪ Use counting finger-plays, songs, and number rhymes, and repeat them often. ▪ Tell and retell stories, sing songs, and read books with numbers and counting. ▪ Provide opportunities for child to fill and dump containers with objects at the water table and sand table. ▪ Provide opportunities to sort common objects and offer commentary as the child sorts (e.g. sorting laundry: “You put all of the socks in this basket. I’ll fold the shirts.”). ▪ Provide small table blocks and unit blocks for child to play, build, and explore. ▪ Comment on sorting and matching during clean-up (e.g. “Do you want to put the big ones on the shelf, or the little ones?”). |