

DOMAIN 4: GENERAL KNOWLEDGE**SUB-DOMAIN: MATHEMATICS AND NUMERACY****MEASUREMENT**

GOAL 40: CHILDREN DEMONSTRATE UNDERSTANDING OF MEASURABLE ATTRIBUTES OF OBJECTS AND THE UNITS, SYSTEMS, AND PROCESSES OF MEASUREMENT (INCLUDING SIZE, VOLUME, HEIGHT, WEIGHT, LENGTH, AREA, AND TIME).

Age Range	Developmental Growth	Child Indicators	Caregiver Strategies
<p>16 to 38 Months</p>	<p>Orders and sequences objects according to different dimensions.</p>	<ul style="list-style-type: none"> ▪ Uses size words, such as “many,” “big,” and “little,” appropriately. ▪ Fills and empties containers with attention to amounts (with sand, water, blocks, or objects). ▪ Compares the size of various everyday objects (e.g. puts different people’s shoes side by side to see differences). ▪ Identifies objects by a single characteristic such as big or small, heavy or light, and tall or short, with assistance. ▪ Looks at two objects and identifies which one is bigger or smaller. ▪ Explores with simple measuring tools such as measuring cups with water or sand. ▪ Explores change of size and volume by squeezing, patting, and rolling play dough. ▪ Demonstrates comparative behavior by nesting up to five cups. ▪ Orders objects by size, volume, height, weight, and length, with assistance. 	<ul style="list-style-type: none"> ▪ Provide sand and water play; giving child opportunities to pour, fill, scoop, weigh, and dump with a variety of containers. ▪ Use language for comparisons according to size, volume, weight, and height (length) of people, toys, and objects. ▪ Use language about basic shapes: square, circle, rectangle, and triangle (e.g. “Can you bite the corner off of the triangle sandwich?”). ▪ In small groups, offer activities where children learn about different sizes of blocks and objects, then offer opportunity to create simple structures with direction. ▪ In free play time, offer blocks of different sizes, weights, lengths, and such, and observe to see when a child might need a prop or comment to build successfully. ▪ Help child arrange toys or objects from smallest to largest or longest to shortest. ▪ Look at pictures of the child, with the child talking about how s/he is getting bigger. ▪ Provide play dough for children to explore, squish, and manipulate. Encourage rolling and pulling to alter clay to take on different dimensions. ▪ Offer opportunity for children to serve themselves at mealtimes, using individual measuring cups with small amounts of liquid, from which each child can pour into their own glass.

			<ul style="list-style-type: none">▪ Use child sized serving utensils for children to serve solids and beverages at mealtimes, and talk about how much the serving utensil holds.▪ Talk about times of the day (e.g. this morning, after lunch, arrival time, leaving time, lunch time, and diapering time).
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