

## **Math Tips**

Use the IQ Guide for the Learning Environment to ensure that you have the required items accessible to children each day. Many classrooms have shelves with numerous cubbies that teachers designate as the Math Area/Center. Remember that it is not necessary to have all of the cubbies filled at all times. For example, the IQ Guide states that there should be one set of items out for counting. The classroom may have counting bears, dinosaurs, bugs, and vehicles. It is only required to have one of these sets out at a time. Rotate materials throughout the year to keep up interest. Extra items can be overwhelming to children and can also make clean-up time challenging.

• Furnishing: Math/manipulative materials are housed on low shelves near a table or designated play area: The Math and Science Areas are often close to one another, but materials need to be clearly separated by the specific center. Both areas may share the same table or play area, such as an area rug or other defined area where children are able to utilize materials with minimal risk of foot traffic from other areas interrupting their work.

#### Ensure the following basic materials are accessible, labeled, and organized:

- One type of manipulative for each of the following:
- $\Rightarrow$  **Counting:** sets of items such as pennies, bears, erasers, beans, plastic bugs, etc.
- $\Rightarrow$  **Sorting:** sets of items that have specific attributes such as color, type, size, etc.
- $\Rightarrow$  **Recognizing shapes:** possibilities include tangrams, attribute blocks, 3d shapes, etc.
- ⇒ **Hand/eye coordination:** interlocking beads, lacing cards, pegs and pegboards, geoboards and rubber bands, etc.

Please note that many items could meet requirements for more than one of these areas, but there must be a different set of items to meet each of the required types. For example, colored magnetic shape builders can be counted, sorted, and used to identify shapes, but they can only **meet the requirement** for one of these areas. Consult your specialist if you have questions.

- Materials for measuring:
  - $\Rightarrow$  Weight: balance or scale
  - $\Rightarrow$  Length: rulers or tape measure
  - ⇒ **Time:** sand timer, working clock, digital timer, or egg timer. "Judy Clocks" or other teaching tools that do not show the passage of time will not meet this requirement.





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### Math Tips (Continued)

#### Real/found materials (2 types):

Buttons	Bottle Tops	Erasers	Acorns	Coins
Dominoes	Popsicle Sticks	Keys	Straws	Golf tees

• Math and manipulative materials to address different developmental levels of the children enrolled in the classroom and to meet children's needs as they progress throughout the year : This can be accomplished in several ways. One example of addressing different developmental levels relating to materials for sorting is for a beginning level option. The teacher could have a set of two types of items that include easily distinguishable attributes such as a tub with popsicle sticks and straws mixed together. A more challenging sorting set could be sorting bugs—which may include multiple bug shapes and multiple colors.

#### Puzzles of varying levels of difficulty and number of pieces (3 types):

	Knobbed We	ooden	Floor	Jigsaw		
٠	Math games (3 types):					
	Number Bingo	Matching G	ames	<b>Counting Games</b>		
	Memory Games	Patterning	Games	Shape Bingo		
	<b>Cookie Sorting Game</b>	Folder Gam	les	Dominoes		
٠	Materials to promote literacy development:					
	Stringing Alphabet Beads	s Books to D	evelop Math Concepts	Writing Materials		
	Alphabet Puzzles	Small Alph	abet Blocks			





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