COG: MATH 1: Classification

Child shows an increasing ability to compare, match, and sort objects into groups according to their attributes

Mark the latest developmental level the child has mastered:

Building			Integrating		
Earlier ○	Middle ○	Later ○	Earlier ○	Middle ○	Later ○
Sorts objects into two groups based on one attribute, but not always accurately	Sorts objects accurately into two or more groups based on one attribute	Sorts objects into two or more groups based on one attribute, then puts all the objects together and re-sorts the entire collection into new groups	Sorts objects into groups based on at least two attributes, sometimes sorting by one attribute and then subdividing those groups based on a second attribute	Sorts objects by attributes that are subtle and not immediately obvious and describes the resulting categorical groups	Sorts objects to gather and organize information, compares the groups of objects, and interprets the information
Possible Examples ▸ Separates blocks into a blue pile and a green pile, leaving a few green blocks in the blue pile. ▸ Sorts rocks into two piles, big and small, after a neighborhood walk. ▸ Picks out toy trucks from a basket of toys and sets them on a nearby shelf, and then picks out toy cars from the basket and sets them on a different shelf.	▸ Separates a pile of toy animals by kind (e.g., dogs, cats, and birds). ▸ Puts crayons, pencils, and markers into different containers. ▸ Sorts a group of big squares and little squares into two piles by using eye gaze to indicate where an adult should put each square.	▸ Sorts buttons by color, and then sorts all of them again by shape or size. ▸ Sorts shoes based on color, and then re-sorts all of them by type (e.g., slippers, boots, tennis shoes). ▸ Sorts flannel-board pieces by type (e.g., shoes, pants, and shirts), and then re-sorts all of them by what is worn on a hot day and what is worn on a cold day.	▸ Separates tiles into four groups: blue circles, blue squares, red circles, and red squares. ▸ Removes utensils from the play kitchen and sorts them into groups: big spoons, small spoons, big forks, and small forks. ▸ Sorts the bin of interlocking blocks into several piles, first by color, then by shape (e.g., squares and rectangles).	▸ Puts pictures of a scarf, hat, and warm jacket together and pictures of a bathing suit, sandals, and bucket together. Communicates, "These three you use in the winter and these three you use in the summer." ▸ Sorts cards with pictures of tools into garden tools, building tools, and kitchen tools, and communicates the type of tools in each group. ▸ Puts a ruler, a magnifying glass, and a balance scale into a storage bin, and scissors, a hole puncher, and construction paper in a basket, and then communicates, "The tools in the storage bin are for the science table and the tools in the basket are for art."	▸ Places a variety of apples into three bowls based on color, counts the number of apples in each bowl and communicates, "The most apples we have are green, then red, then yellow." ▸ Sorts cards used to track the weather during the month and counts the number of cards in each category to report how many sunny, cloudy, and rainy days there were that month. ▸ Organizes the forks and spoons, and communicates, "We have more spoons than forks and more small spoons than large spoons."

○ **Child is emerging to the next developmental level**
○ **Unable to rate this measure due to extended absence**

COG: MATH 1 (of 6)	Classification	COG: MATH 1 (of 6)

COG: MATH 5: Patterning

Child shows an increasing ability to recognize, reproduce, and create patterns of varying complexity

Mark the latest developmental level the child has mastered:

Building			Integrating		
Earlier ◯	Middle ◯	Later ◯	Earlier ◯	Middle ◯	Later ◯
Matches simple sequences that are seen, heard, or experienced	**Attempts to create simple repeating patterns (with two elements)**	**Extends a simple repeating pattern (with two elements) by adding one or more repetitions of an existing pattern**	**Creates, copies, or extends complex patterns (with three or more elements)**	**Identifies smallest repeating unit of the pattern;** *and* **Translates pattern from one mode of representation to another (e.g., using an ABB pattern with shapes and then with movement)**	**Identifies growing patterns (i.e., patterns that increase with every repetition) by describing their numeric or geometric progressions**
— Possible Examples — ▸ Lines up toy farm animals in the same order as a peer does. ▸ Repeats series of actions of touching head, shoulders, knees, and toes during the song "Head, Shoulders, Knees, and Toes." ▸ Repeats the refrain, "Brown bear, brown bear, what do you see?" as an adult reads from the book *Brown Bear, Brown Bear, What Do You See?*.	▸ Creates a simple repeating pattern using two different stamps, such as circle, star, circle, star. ▸ Claps, stomps, and then repeats. ▸ Paints pairs of green and yellow dots, making a pattern of two green, two yellow, two green, two yellow (numbers of dots may not be consistent).	▸ Continues a simple repeating pattern of drumbeats started by an adult. ▸ Builds a fence out of blocks, continuing the pattern begun by a peer: tall block, short block, tall block, short block. ▸ Extends a simple repeating pattern of colors on a computer, using a touch screen.	▸ Add cubes to continue red-yellow-blue pattern. ▸ Makes up a rhythmic sequence by clapping, patting, and stomping. ▸ Makes a fruit kebab in a repeating sequence of banana, strawberry, blueberry, banana, strawberry, blueberry, like a fruit kebab that another child is eating.	▸ Observes the square-circle-circle pattern on the rug and communicates, "Square, circle, circle repeats over and over." ▸ Creates a movement pattern of jump-clap-clap to match the musical sounds of drum-cymbal-cymbal. ▸ Strings beads in a red- red-blue-blue pattern and communicates, "It's the same like that one with green-green-purple-purple, but with different colors."	▸ Communicates, "This is the smallest square and then it is getting bigger and bigger," when describing the progression in a square growing pattern. ▸ Communicates, "Here there is one circle, then there are two more circles and here there are three more circles, so the next one will have four more circles." ▸ Points to a growing pattern they built in a group activity and communicates, "This house has one square and one triangle, this one has two squares and two triangles, and this house has three squares and three triangles."

◯ **Child is emerging to the next developmental level**
◯ **Unable to rate this measure due to extended absence**