

Young children will spontaneously sort all manner of objects. Adults are helpful when they remark “I see you made a set of _____”, describing matched colors or types. Give children a wide variety of items to sort, and build vocabulary with them. Choose appropriately-sized objects – no choking hazards.

To guide the child towards matrixes, give a set of objects that is complete in the range of colors and the range of types, such as that pictured. Have a gridded mat of cardboard, vinyl, or felt with enough squares for the objects.

Invite the child to “find some that go together”. Describe the set “I see you made a set of yellow” and invite to make a row on the mat. (Very young children may do better without using the gridded side of the mat, simply making a loose row.) Then invite the child to find “another set of things that go together”, and continue making rows until all objects are used.

Point out where a column is beginning to form, such as two circles that happen to be one above the other, and invite to trade the other items in the column so that they too are red. “Can you trade this triangle for a circle?” Name the column when it is complete: “You made a column of squares”.

Invite the child to make more matching columns until complete. Usually while sorting columns by one attribute, shape in this example, children disarrange the rows of color. Don’t shame or tease the level of thought the child is at. Just invite to recreate the row of the other attribute, color in this example: “Can you change this row back into all yellows again?”

After the lesson, allow the child many further opportunities to sort objects onto gridded mats. Some weeks or months later, when the child can easily sort by both attributes at once (as adults do), you can add a game where child closes eyes and adult makes a mistake on the completed grid, then child opens eyes and fixes it.

Besides Froebel tiles, your imagination will find a wide variety of things to sort into matrixes:

- All wooden, with a row of spools, one of buttons, and one of Scrabble tiles, all with the same three colors.
- All plastic dinosaurs, five types in five colors
- All plastic, with rows of buttons, legos, doll shoes, in matching colors

I like to get tubs from the teacher supply stores of identical objects in various colors, and make mixes for sorting and for matrixes that are holiday or seasonally focused, or related in some logical way, such as all vehicles, all mammals, etc. For plastic objects, vinyl mat with lines drawn to make a correctly-sized grid (each square big enough to hold the biggest object is crucial!) is ideal.

For Froebel Gifts, wool felt embroidered into grids is best, as it is not slippery. If you aren't ready to embroider, draw lines with chalk.

Older children can be given sets, felt, chalk, and a ruler, to draw their own grid of how they have sorted the objects. Introduce Venn diagrams by drawing chalk circles around sets that have overlapping elements.