

Map of the Foundations Mathematics

Domain

Strand

Algebra and Functions (Classification and Patterning)*

Age

At around 48 months of age

At around 60 months of age

Substrand

1.0 Children begin to sort and classify objects in their everyday environment.

1.0 Children expand their understanding of sorting and classifying objects in their everyday environment.

Foundations

1.1 Sort and classify objects by *one* attribute into two or more groups, with increasing accuracy.

1.1 Sort and classify objects by *one or more* attributes, into two or more groups, with increasing accuracy (e.g., may sort first by one attribute and then by another attribute).[†]

Examples

Examples

- Selects some red cars for himself and some green cars for his friend, leaving the rest of the cars unsorted.
- Chooses the blue plates from a variety of plates to set the table in the kitchen play area.
- Sorts through laundry in the basket and takes out all the socks.
- Places all the square tiles in one bucket and all the round tiles in another bucket.
- Attempts to arrange blocks by size and communicates, "I put all the big blocks here and all the small ones there."

Examples

- Sorts the large blue beads into one container and the small red beads in another.
- Puts black beans, red kidney beans, and pinto beans into separate bowls during a cooking activity.
- Arranges blocks on the shelf according to shape.
- Sorts a variety of animal photographs into two groups: those that fly and those that swim.
- Sorts buttons first by size and then each subgroup by color into muffin tin cups.

* Throughout these mathematics foundations many examples describe the child manipulating objects. Children with motor impairments may need assistance from an adult or peer to manipulate objects in order to do things such as count, sort, compare, order, measure, create patterns, or solve problems. A child might also use adaptive materials (e.g., large manipulatives that are easy to grasp). Alternately, a child might demonstrate knowledge in these areas without directly manipulating objects. For example, a child might direct a peer or teacher to place several objects in order from smallest to largest. Children with visual impairments might be offered materials for counting, sorting, or problem solving that are easily distinguishable by touch. Their engagement is also facilitated by using containers, trays, and so forth that contain their materials and clearly define their work space.

[†] Attributes include, but are not limited to, size, shape, or color.

Includes notes for children with disabilities