Mathematics

Early learning experiences will support children to understand counting and cardinality.

1 Number Names

1. Say or sign a few number names, but may not necessarily recite them in the correct order M.18.1
2. Say or sign a few number names, with beginning evidence of correct sequence (e.g., starts with “one”) M.24.1
3. Say or sign number sequence up to at least five. Use other number names but not necessarily in the correct order M.36.1
4. Say or sign the number sequence up to at least 10 M.48.1
5. Say or sign the number sequence up to at least 20 M.60.1

2 Cardinality

1. Demonstrate one-to-one or one-to-many correspondence (e.g., may fill each compartment in a egg carton with one or several objects) M.18.2
2. Put objects in one-to-one correspondence (e.g., puts one item in each compartment) M.24.2
3. Count two to three objects using oneto-one correspondence M.36.2
4. Count up to at least five objects using one-to-one correspondence, using the number name of the last object counted to represent the total number of objects in a set M.48.2
5. Count out a set of objects up to four M.48.3
6. Count up to 10 objects using one-to-one correspondence, regardless of configuration, using the number name of the last object counted to represent the total number of objects in a set M.60.2
7. Count out a set of objects up to five M.60.3

3 Written Numerals

1. Recognize written numerals up to at least five M.48.4
2. Recognize written numerals up to at least 10 M.60.4

4 Recognition of Quantity

1. Name groups of one to two objects M.24.3
2. Name and match a small collection of up to three objects M.36.3
3. Recognize and name, without counting, the number of objects in small groups of at least 3 or 4 objects M.48.5

Skip to main content

4 Quickly recognize and name, without counting, the number of objects in collections of up to at least five items M.60.5

5 Comparison

1 Compare collections that are quite different in size M.24.4

2 Compare collections of 1 to 4 similar items verbally or nonverbally M.36.4

3 Compare sets of 1 to 5 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same M.48.6

4 Compare sets of up to 10 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same M.60.6

Early learning experiences will support children to understand and describe relationships to solve problems (operations and algebraic thinking).

1 Number Operations

1 Use some vocabulary related to relative quantity (e.g., “more,” “less”) M.36.5

2 Understand that adding to (or taking away) one or more objects from a group will increase or decrease the objects in the group M.48.7

3 Use real-world situations and concrete objects to model and solve addition (e.g., putting together) and subtraction (e.g., taking away) problems up through five M.60.7

4 Recognize and describe parts contained in larger numbers by composing number combinations up to at least five (e.g., recognize how many have been secretly taken away from a group of five objects) M.60.8

Early learning experiences will support children to understand the attributes and relative properties of objects (measurement and data).

1 Measurement

1 Use some vocabulary related to size and quantity (e.g., say something is “big” or request “more”) M.24.5

2 Have an increasing vocabulary related to number, size and quantity (e.g., use words such as “tall,” “long”) M.36.6

3 Recognize measurable attribute of an object such as length, weight or capacity M.48.8

4 Compare the measurable attributes of two or more objects (e.g., length, weight and capacity) and describe the comparison using appropriate vocabulary (e.g., longer, shorter, same length, heavier, lighter, same weight, holds more, holds less, holds the same amount) M.60.9

5 Begin to use strategies to determine measurable attributes (e.g., length or capacity of objects). May use comparison, standard or non-standard measurement tools M.60.10

Skip to main content

2 Data

1. Sort objects into two groups, count, and compare the quantity of the groups formed (e.g., indicate which is more) M.48.9
2. Represent data using a concrete object or picture graph according to one attribute M. 60.11

3 Sorting and Classifying

1. Match objects that are the same M.18.3
2. Sort objects using inconsistent strategies (e.g., favorite items, colors) M.24.6
3. Sort on the basis of one attribute with adult support M.36.7
4. Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape) M.48.10
5. Sort and classify a set of objects on the basis of one attribute independently and describe the sorting rule. Can re-sort and classify the same set of objects based on a different attribute M.60.12

Early learning experiences will support children to understand shapes and spatial relationships (geometry and spatial sense).

1 Spatial Relationships

1. Adjust their reach and grasp based upon distance, size and weight of an object M.18.4
2. Show beginning understanding of positional vocabulary (e.g., up/down, in/out, on/off, under) M.24.7
3. Find objects or locations based upon landmarks and position words (e.g., “Your blanket is on the couch.”) M.36.8
4. Use positional vocabulary (e.g., up/down, in/out, on/off, under) to identify and describe the location of an object M.48.11
5. Use relational vocabulary of proximity (e.g., beside, next to, between, above, below, over and under) to identify and describe the location of an object M.60.13

2 Identification of Shapes

1. Match familiar shapes (e.g., circle, square and typical triangle) with same size and orientation M.24.8
2. Match familiar shapes with different size and orientation M.36.9
3. Identify 2-dimensional shapes (starting with familiar shapes such as circle and triangle) in different orientations and sizes M.48.12
4. Identify and describe a variety of 2-dimensional and 3-dimensional shapes with mathematical names (e.g., ball/sphere, box/rectangular prism, can/ cylinder) regardless of orientation and size M.60.14

3 Composition of Shapes

Skip to main content

Combine two or more shapes to create a new shape or to represent an object in the environment M.48.13

2 Complete a shape puzzle or a new figure by putting multiple shapes together with purpose M.60.15