

# Math Curriculum Toddler

### 2.1 Numbers and Operations

## **Expectations for Students**

### **Young Toddler**

- CC.2.1 YT.A.1 Imitate rote counting using some names of numbers.
  - Attempt to count, not always in the correct order
- CC2.1 YT.A.3 Explore simple comparisons of quantity.
  - Ask for "more."
  - Notice differences in size. (e.g., big, small)
  - Indicate when something is gone.
  - Participate in comparison activities.
- CC2.1 YT.MP Engage and persist in numerical play.
  - Stack and unstack objects.
  - Dump and fill objects into and out of containers.
  - Place objects inside of other objects.
  - Engage in experiences related to numbers. (e.g., counting songs, finger plays, reading number books)

#### Older Toddler

CC2.1 OT.A.1 Know some number names and the count sequence.

- Rote count to 5.
- Recognize some numerals. (e.g., notice numerals in the environment and names some of them, point to a numeral when asked)
- Engage in experiences related to numbers. (e.g., counting songs, finger plays, reading number books)
- CC2.1 OT.A.2 Count to tell the number of objects.
  - Subitize (visually quantify) to determine how many; attach a numeric value to a set of objects without counting up to 3.
  - Practice one-to-one correspondence. (e.g., setting out snack, counting children, matching objects)
  - Verbalize how many objects they have.
  - Use counting and numbers as part of play and as a means for determining quantity.
- CC2.1 OT.A.3 Use comparative language to show understanding of more or less.
  - Recognize who has more than another.
  - Use terms like "more," "less," "bigger than," "smaller than," "the same."

• Identify groups of more or less.

CC2.1 OT.MP Use mathematical processes when quantifying, comparing, and representing numbers.

- Engage in numerical play.
- Persist in numerical play. (Reference AL.2 OT.C)
- When prompted, communicate thinking while engaged in numerical play.
- Talk and listen to peers during numerical play.
- Use simple forms of numerical representations. (e.g., pictures, objects, fingers)

## 2.2 Algebraic Concepts

# **Expectations for Students**

### **Young Toddler**

CC.2.2 YT.A.1 Sort manipulatives into sets.

- Group like objects into sets.
- Engage in experiences related to adding and subtracting. (e.g., songs, finger plays, books)

#### Older Toddler

CC.2.2 OT.A.1 Add to and take apart sets.

- Group like objects into sets.
- Engage in experiences related to adding and subtracting. (e.g., songs, finger plays, books)
- Use vocabulary that includes subtraction or addition concepts. (e.g., "I need one more." "They're all gone.")

#### 2.3 Geometry

### **Expectations for Students**

### **Young Toddler**

CC.2.3 YT.A.1 Match identical shapes.

- Put together simple puzzles with assistance.
- Place shapes in shape sorter.

CC2.3 YT.MP Engage and persist in geometric play.

- Put together simple puzzles with assistance.
- Place shapes in shape sorter.

#### Older Toddler

CC2.3 OT.A.1 Recognize and identify basic shapes in the environment.

- Describe objects in the environment and name shapes.
- Complete simple puzzles.
- Manipulate objects of various shape and size.

CC2.3 OT.A.2 Create and compose simple shapes.

- Use simple shapes in drawing.
- Use 3-D materials to represent simple shapes.
- Use fingers or body to represent shapes when asked

CC2.3 OT.MP Use mathematical processes when creating and composing shapes

- Describe objects in the environment and name shapes.
- Complete simple puzzles.
- Manipulate objects of various shapes and sizes.
- Persist in geometric play. (Reference AL.2 OT.C)
- Engage in geometric play.
- Problem-solve during geometric play. (Reference AL.4 OT.C)
- When prompted, communicate thinking while engaged in numerical play.
- Talk and listen to peers during numerical play.

#### 2.4 Measurement, Data, and Probability

#### **Expectations for Students**

#### **Young Toddler**

- CC2.4 YT.A.1 Engage in measurement experiences.
  - Begin to use size words.
  - Explore objects to determine size.
  - Explore measuring tools.
  - Fills and empties containers in the water table.
- CC2.4 YT.A.4 Participate in sorting objects.
  - Put similar objects into piles.
  - Begin to sort objects by size or shape (e.g., beads, blocks, counting bears) with teacher support.
- CC2.1 YT.MP Engage and persist when measuring and sorting objects
  - Begin to use size words.
  - Explore objects to determine size.
  - Explore measuring tools.
  - Fills and empties containers in the water table.
  - Put similar objects into piles.
  - Begin to sort objects by size or shape (e.g., beads, blocks, counting bears) with teacher support.

#### Older Toddler

- CC2.4 OT.A.1 Use basic measurement vocabulary.
  - Use size words. (e.g., many, big, and little)
  - Compare sizes of objects.
  - Explore objects to determine size.
  - Explore measuring tools.
  - Measure objects with adult assistance.
  - Begin to use nonstandard (e.g., hand, shoe, yarn, block) or standard tools to measure objects.
- CC2.4 OT.A.4 Classify objects and count the number of objects in each category.
  - Sort objects by one attribute. (e.g., color, size, shape)
  - Classify up to five objects using one attribute into categories.
  - Count the number of objects in each category and with adult assistance display the number of objects in each category.
- CC2.1 OT.MP Use mathematical processes when measuring, organizing data.
  - Engage in measurement activities.
  - Engage in activities that include organizing data.
  - Persist in measurement activities. (Reference AL.2 OT.C)
  - Persist in activities that include organizing data. (Reference AL.2 OT.C)
  - Problem-solve during measurement activities. (Reference AL.4 OT.C)
  - Problem-solve in activities that include organizing data. (Reference AL.4 OT.C)

- When prompted, communicate thinking while engaged in measurement activities and organizing.
- Talk and listen to peers.

### <u>Activities and Experiences</u>

Big and Little sorting

Books

Recognizing numbers and shapes

Sorting

Discussions

Sensory bins

Circle time One-to- one correspondence Exploring music with numbers and shapes Exploring Geometric solids

Rote counting Visual discrimination of size and graduation

Environment counting Geometric shape cylinder

Introducing the concept of 0 Exploring scales
Object to picture counting Measuring and sorting objects

Picture cards
Sort objects by size or shape
Stacking
Engage in cooking

### Materials and Resources

The Number Box
Can tower
Picture cards
Nesting cups
Building blocks

Ring tower

Disc tower

Shape sorter

Geometric solids

Knobbed cylinders

Number books

Peg board

Ball tracker

Puzzles

Art medium

Songs

Balancing scale

Music with instruments and counting the Water table

beats in the song. Beads
Using different objects to count Measuring of

Using different objects to count Measuring cups
Ramps and counting the objects

Assessments

Montessori Album assessments

Checklist Observation