

Mathematics: Age 3

COUNTING AND CARDINALITY

1 Child knows number names and the count sequence. 1

- a Says or signs some number words in sequence (up to 10), starting with one. 1.A
 - b With support, understands that counting words are separate words, such as “one,” “two,” “three” versus “onetwothree.” 1.B
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2 Child recognizes the number of objects in a small set. 2

- a Develops an understanding of what whole numbers mean. 2.A
 - b With support, begins to recognize the number of small objects in groups without counting (referred to as “subitizing”). For example, there are two cars in a pile. A child looks and quickly says, “Look, two cars!” 2.B
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3 Child understands the relationship between numbers and quantities. 3

- a With support, begins to coordinate verbal counting with objects by pointing to or moving objects or small groups of objects laid in a line (referred to as one-to-one correspondence). 3.A
 - b With support, begins to understand that the last number represents how many objects are in a group (cardinality). For example, a child is asked to count a pile of bears. The adult asks “How many?” The child points and counts one, two, three and says, “Three!” 3.B
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4 Child compares numbers. 4

- a With support, begins to accurately count and compare objects that are about the same size and are in small groups with trusted adult assistance, such as counts a pile of two blocks and a pile of four, and determines whether the piles have the same or different numbers of blocks. 4.A
 - b Identifies the first and second objects in a sequence. 4.B
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5 Child associates a quantity with written numerals and begins to write numbers. 5

- a With support, begins to understand that a written numeral represents a quantity and may draw objects or use informal symbols to represent numbers. 5.A
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OPERATIONS AND ALGEBRAIC THINKING

6 Child understands addition as adding to and understands subtraction as taking away from. 6

- a Begins to add and subtract very small collections of objects with trusted adult support. For example, the adult says, “You have three grapes and get one more. How many in all?” Child counts out three, then counts out one more, then counts all four: “One, two, three, four. I have four!” 6.A

7 Child understands simple patterns. 7

- a With support, recognizes a simple pattern, and with trusted adult assistance, fills in the missing element of a pattern, such as red, blue, red, blue, ____, blue. Duplicates and extends ABABAB patterns. 7.A

NUMBERS AND OPERATIONS IN BASE TEN

8 Child works with numbers 11 to 19 to gain foundations for place value. 8

- a Not addressed in Head Start Early Learning Outcomes Framework. 8.A

MEASUREMENT AND DATA

9 Child measures objects by their various attributes using standard and non-standard measurement and uses differences in attributes to make comparisons. 9

- a With trusted adult support, begins to understand that attributes can be compared, such as one child can be taller than another child. 9.A

10 Child classifies objects into given categories; counts the numbers of objects in each category and sorts the categories by count. (Limit category counts to be less than or equal to 10). 10

- a Not addressed in HEAD START EARLY LEARNING OUTCOMES FRAMEWORK. 10.A

GEOMETRY AND SPATIAL SENSE

11 Child identifies, describes, compares, and composes shapes. 11

- a Recognizes and names a typical circle, square, and (sometimes) triangle. 11.A
- b With trusted adult support, matches some shapes that are different sizes and orientations. 11.B

12 Child explores the positions of objects in space. 12

- a Begins to understand spatial vocabulary. 12.A
- b With trusted adult support, follows directions involving their own position in space, such as “Stand up and stretch your arms to the sky.” 12.B