

PRESCHOOL MATHEMATICS RUBRIC

COUNTING AND CARDINALITY

Essential Standard: Rote counts numbers to 10

STANDARDS ADDRESSED:

MA.PK.CC.1. LISTEN TO AND SAY THE NAMES OF NUMBERS IN MEANINGFUL CONTEXTS

First Semester: Benchmarks	
Warning (1)	Little or no understanding of counting
Needs Improvement (2)	With prompting and support, counts to 5 in sequential order
Proficient (3)	Independently counts to 5 in sequential order

Second Semester: Benchmarks	
Warning (1)	Little or no understanding of counting
Needs Improvement (2)	With prompting and support, counts to 10 in sequential order
Proficient (3)	Independently counts to 10 in sequential order

COUNTING AND CARDINALITY

Essential Standard: Recognizes numerals from 0-10

STANDARDS ADDRESSED:

MA.PK.CC.2. RECOGNIZE AND NAME WRITTEN NUMERALS 0-10

First Semester: Benchmarks	
Warning (1)	Little or no understanding of written numerals
Needs Improvement (2)	With prompting and support, identifies numerals 0-5
Proficient (3)	Independently identifies numerals 0-5

Second Semester: Benchmarks	
Warning (1)	Little or no understanding of written numerals
Needs Improvement (2)	With prompting and support, identifies numerals 0-10
Proficient (3)	Independently identifies numerals 0-10

COUNTING AND CARDINALITY

Essential Standard: Names written numerals 0-10

STANDARDS ADDRESSED:

MA.PK.CC.2. RECOGNIZE AND NAME WRITTEN NUMERALS 0-10

First Semester: Benchmarks	
Warning (1)	Unable to name numerals 0-5
Needs Improvement (2)	With prompting and support, names numerals 0-5
Proficient (3)	Independently names numerals 0-5

Second Semester: Benchmarks	
Warning (1)	Unable to name numerals 0-10
Needs Improvement (2)	With prompting and support, names numerals 0-10
Proficient (3)	Independently names numerals 0-10

COUNTING AND CARDINALITY

Essential Standard: Counts concrete objects to represent the corresponding numeral

STANDARDS ADDRESSED:

MA.PK.CC.3. UNDERSTAND THE RELATIONSHIPS BETWEEN NUMERALS AND QUANTITIES UP TO TEN

First Semester: Benchmarks	
Warning (1)	Unable to count objects to represent a numeral
Needs Improvement (2)	With prompting and support, counts concrete objects to represent the numerals from 1-5
Proficient (3)	Independently counts concrete objects to represent the numerals from 1-5

Second Semester: Benchmarks	
Warning (1)	Unable to count objects to represent a numeral
Needs Improvement (2)	With prompting and support, counts concrete objects to represent the numerals from 1-10
Proficient (3)	Independently counts concrete objects to represent the numerals from 1-10

PRESCHOOL MATHMATICS RUBRIC

COUNTING AND CARDINALITY

Essential Standard: Using one-to-one correspondence, counts objects and actions up to 10

STANDARDS ADDRESSED:

MA.PK.CC.4. COUNT MANY KINDS OF CONCRETE OBJECTS AND ACTIONS UP TO TEN, USING ONE-TO-ONE CORRESPONDENCE, AND ACCURATELY COUNT AS MANY AS SEVEN THINGS IN A SCATTERED CONFIGURATION

First Trimester: Benchmarks

Warning (1)	Unable to count objects and actions up to 5 using one-to-one correspondence
Needs Improvement (2)	With prompting and support, counts objects, but not actions, up to 5 using one-to-one correspondence
Proficient (3)	Independently counts objects and actions up to 5 using one-to-one correspondence

Second Trimester: Benchmarks

Warning (1)	Unable to count objects and actions up to 10 using one-to-one correspondence
Needs Improvement (2)	With prompting and support, counts objects, but not actions, up to 10 using one-to-one correspondence
Proficient (3)	Independently counts objects and actions up to 10 using one-to-one correspondence

COUNTING AND CARDINALITY

Essential Standard: Counts scattered configuration of objects up to 7

STANDARDS ADDRESSED:

MA.PK.CC.4. COUNT MANY KINDS OF CONCRETE OBJECTS AND ACTIONS UP TO TEN, USING ONE-TO-ONE CORRESPONDENCE, AND ACCURATELY COUNT AS MANY AS SEVEN THINGS IN A SCATTERED CONFIGURATION

First Semester: Benchmarks

Warning (1)	Little or no understanding of counting the number of objects in a scattered configuration
Needs Improvement (2)	With prompting and support, counts to tell the number of objects in a scattered configuration of up to 3 using one-to-one correspondence
Proficient (3)	Independently counts to tell the number of objects in a scattered configuration of up to 3 using one-to-one correspondence

Second Semester: Benchmarks

Warning (1)	Little or no understanding of counting the number of objects in a scattered configuration
Needs Improvement (2)	With prompting and support, counts to tell the number of objects in a scattered configuration of up to 7 using one-to-one correspondence
Proficient (3)	Independently counts to tell the number of objects in a scattered configuration of up to 7 using one-to-one correspondence

COUNTING AND CARDINALITY

Essential Standard: Uses comparative language to describe collections of objects

STANDARDS ADDRESSED:

MA.PK.CC.5. USE COMPARATIVE LANGUAGE, SUCH AS MORE/LESS THAN, EQUAL TO, TO COMPARE AND DESCRIBE COLLECTIONS OF OBJECTS

First Semester: Benchmarks

	Not assessed during this semester
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Second Semester: Benchmarks

Warning (1)	Little or no understanding of more, less or the same amount
Needs Improvement (2)	With prompting and support, identifies whether the number of objects in one group is more, less, or the same amount to the number of objects in another group
Proficient (3)	Independently identifies whether the number of objects in one group is more, less, or the same amount to the number of objects in another group

PRESCHOOL MATHEMATICS RUBRIC

OPERATIONS AND ALGEBRAIC THINKING

Essential Standard: Puts up to 5 objects together to demonstrate addition

STANDARDS ADDRESSED:

MA.PK.OA.1. USE CONCRETE OBJECTS TO MODEL REAL-WORLD ADDITION (PUTTING TOGETHER) AND SUBTRACTION (TAKING AWAY) PROBLEMS UP THROUGH FIVE.

First Semester: Benchmarks	
	Not assessed during this semester

Second Semester: Benchmarks	
Warning (1)	Unable to represent addition by putting objects together
Needs Improvement (2)	With prompting and support, represents addition by putting up to 5 objects together
Proficient (3)	Independently represents addition by putting up to 5 objects together

OPERATIONS AND ALGEBRAIC THINKING

Essential Standard: Take away up to 5 objects to demonstrate subtraction

STANDARDS ADDRESSED:

MA.PK.OA.1. USE CONCRETE OBJECTS TO MODEL REAL-WORLD ADDITION (PUTTING TOGETHER) AND SUBTRACTION (TAKING AWAY) PROBLEMS UP THROUGH FIVE.

First Semester: Benchmarks	
	Not assessed during this semester

Second Semester: Benchmarks	
Warning (1)	Unable to represent subtraction by taking away objects
Needs Improvement (2)	With prompting and support, represents subtraction by taking away up to 5 objects
Proficient (3)	Independently represents subtraction by taking away up to 5 objects

MEASUREMENT AND DATA

Essential Standard: Recognizes measurable attributes of objects (e.g. length, area, weight, and capacity) and uses vocabulary to express concepts related to length, area, weight, and capacity.

STANDARDS ADDRESSED:

MA.PK.MD.1. RECOGNIZE THE ATTRIBUTES OF LENGTH, AREA, WEIGHT, AND CAPACITY OF EVERYDAY OBJECTS USING APPROPRIATE VOCABULARY (E.G. LONG, SHORT, TALL, HEAVY, LIGHT, BIG, SMALL, WIDE, NARROW)

MA.PK.LS.1.G. USE VOCABULARY IN THE MASSACHUSETTS CURRICULUM FRAMEWORK FOR MATHEMATICS PRE-KINDERGARTEN STANDARDS TO EXPRESS CONCEPTS RELATED TO LENGTH, AREA, WEIGHT, CAPACITY, AND VOLUME.

First Semester: Benchmarks	
Warning (1)	Unable to identify objects as long, short, tall, big and small/little
Needs Improvement (2)	With prompting and support, identifies objects as long, short, tall, big and small/little
Proficient (3)	Independently identifies objects as long, short, tall, big and small/little

Second Semester: Benchmarks	
Warning (1)	Unable to identify objects as long, short, tall, big, small/little, heavy, light, wide, narrow, empty, and full
Needs Improvement (2)	With prompting and support, identifies objects as long, short, tall, big, small/little heavy, light, wide, narrow, empty, and full
Proficient (3)	Independently identifies objects as long, short, tall, big, small/little heavy, light, wide, narrow, empty, and full

MEASUREMENT AND DATA
Essential Standard: Compares measureable attributes of two objects

STANDARDS ADDRESSED:
MA.PK.MD2. COMPARE THE ATTRIBUTES OF LENGTH AND WEIGHT FOR TWO OBJECTS, INCLUDING LONGER/SHORTER, SAME LENGTH; HEAVIER/LIGHTER, SAME WEIGHT; HOLDS MORE/LESS, HOLDS THE SAME AMOUNT

First Semester: Benchmarks	
	Not assessed during this semester

Second Semester: Benchmarks	
Warning (1)	Unable to compare measureable attributes of two objects
Needs Improvement (2)	With prompting and support, identifies comparative measureable attributes of two objects (e.g. longer/shorter, same length; heavier/lighter, same weight; holds more/less, holds the same amount)
Proficient (3)	Independently identifies comparative measureable attributes of two objects (e.g. longer/shorter, same length; heavier/lighter, same weight; holds more/less, holds the same amount)

MEASUREMENT AND DATA
Essential Standard: Sorts objects by more than one attribute (color, size, shape, object type)

STANDARDS ADDRESSED:
MA.PK.MD3. SORT, CATEGORIZE, AND CLASSIFY OBJECTS BY MORE THAN ONE ATTRIBUTE
MA.PK.LS5A. DEMONSTRATE UNDERSTANDING OF CONCEPTS BY SORTING COMMON OBJECTS INTO CATEGORIES (E.G. SORT OBJECTS BY COLOR, SHAPE, OR TEXTURE)

First Semester: Benchmarks	
Warning (1)	Unable to sort a group of objects by one attribute
Needs Improvement (2)	With prompting and support, sorts a group of objects by one attribute
Proficient (3)	Given a group of objects, independently sorts by one attribute

Second Semester: Benchmarks	
Warning (1)	Unable to sort a group of objects by more than one attribute
Needs Improvement (2)	With prompting and support, sorts a group of objects by more than one attribute
Proficient (3)	Given a group of objects, independently sorts by more than one attribute

MEASUREMENT AND DATA
Essential Standard: Recognizes that money is represented by coins and dollars

STANDARDS ADDRESSED:
MA.PK.MD4. RECOGNIZE THAT CERTAIN OBJECTS ARE COINS AND THAT DOLLARS AND COINS REPRESENT MONEY

First Semester: Benchmarks	
	Not assessed during this semester

Second Semester: Benchmarks	
Warning (1)	Unable to recognize that money includes coins and dollars
Needs Improvement (2)	With prompting and support, identifies that money includes coins and dollars
Proficient (3)	Independently identifies that money includes coins and dollars

PRESCHOOL MATHEMATICS RUBRIC

GEOMETRY

Essential Standard: Identifies position of an object in space (in, on, under, over, next to, off, out of, up, together, apart, on top)

STANDARDS ADDRESSED:

MA.PK.G1. IDENTIFY RELATIVE POSITIONS OF OBJECTS IN SPACE, AND USE APPROPRIATE LANGUAGE

First Semester: Benchmarks	
Warning (1)	Unable to demonstrate positions in space
Needs Improvement (2)	With prompting and support, demonstrates positions of objects in space
Proficient (3)	Independently demonstrates positions of objects in space

Second Semester: Benchmarks	
Warning (1)	Unable to label positions of objects in space
Needs Improvement (2)	With prompting and support, labels positions of objects in space
Proficient (3)	Independently labels positions of objects in space

GEOMETRY

Essential Standard: Identifies various two-dimensional shapes using appropriate language (circle, square, triangle, rectangle)

STANDARDS ADDRESSED:

MA.PK.G2. IDENTIFY VARIOUS TWO-DIMENSIONAL SHAPES USING APPROPRIATE LANGUAGE

First Semester: Benchmarks	
Warning (1)	Unable to accurately identify two-dimensional shapes upon request
Needs Improvement (2)	With prompting and support, accurately identifies two-dimensional shapes upon request
Proficient (3)	Accurately identifies two-dimensional shapes upon request

Second Semester: Benchmarks	
Warning (1)	Unable to accurately label two-dimensional shapes upon request
Needs Improvement (2)	With prompting and support, accurately labels two-dimensional shapes upon request
Proficient (3)	Accurately labels two-dimensional shapes upon request

GEOMETRY

Essential Standard: Creates simple three-dimensional shapes using manipulative materials

STANDARDS ADDRESSED:

MA.PK.G3. CREATE AND REPRESENT THREE-DIMENSIONAL SHAPES (BALL/SPHERE, SQUARE BOX/CUBE, TUBE/CYLINDER) USING VARIOUS MANIPULATIVE MATERIALS

First Semester: Benchmarks	
	Not assessed during this semester

Second Semester: Benchmarks	
Warning (1)	Unable to create three-dimensional shapes using manipulative materials
Needs Improvement (2)	With prompting and support, creates three-dimensional shapes using manipulative materials
Proficient (3)	Independently creates three-dimensional shapes using manipulative materials