MONTESSORI CURRICULUM TO STANDARDS ALIGNMENT

PRIMARY • PK3–K

SENSORIAL

Montessori Curriculum to Standards Alignment
Primary • PK3–K
Sensorial

National Center for Montessori in the Public Sector

CONTENTS

EDUCATION OF THE SENSES

TACTILE SENSE

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MONTESSORI LESSONS	PURPOSE
Rough and Smooth Boards • One • Two • Three	• To give the child language of rough and smooth. • Refinement of the perception of texture. • Muscular control for lightness of touch. • To describe the measurable attributes of objects. • Indirect preparation for writing: lightness of touch when using a writing instrument.
Touch Tablets • Pairing • Grading	• Refinement of the perception of texture. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories. • Indirect preparation for writing: lightness of touch when using a writing instrument.
Fabric Matching • Fabric Box One • Fabric Box Two	• The refinement of the perception of texture. • To describe the measurable attributes of objects. • To classify objects into categories. • To compare two objects with a measurable attribute in common.
Thermic Bottles • Pairing • Grading	• Refinement of the perception of temperature. • Awareness that the same substance can have different temperatures. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To describe the relative temperature of objects.

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EDUCATION OF THE SENSES

MONTESSORI LESSONS	PURPOSE
Thermic Tablets	• Refinement of the thermic perception. • Awareness that different substances at the same temperature have different apparent temperatures due to their heat conducting properties. • To describe the measurable attributes of objects. • To classify objects into categories. • To compare two objects with a measurable attribute in common. • To describe the relative temperature of objects.
Baric Tablets	• Refinement of the baric perception (weight through touch). • To describe the measurable attributes of objects. • To classify objects into categories. • To compare two objects with a measurable attribute in common. • To describe the relative temperature of objects.

ASSESSMENT VOCABULARY

attribute	length	**Cognitive Verbs**
category	less	classify
cold	more	compare
colder	number	describe
compare	sort	sort
count	warmer	
difference	weight	
hot		

ASSESSMENT CONSIDERATIONS

Students will be asked to:
• Describe the measurable attributes of objects. (K.MD.A.1)
• Compare two objects with a measurable attribute in common. (K.MD.A.2)
• Classify objects into categories. (K.MD.B.3)
• Describe the relative temperature of objects. (NGS: K-PS3-1)

COMMON CORE STATE STANDARDS (CCSS.MATH.CONTENT)

MEASUREMENT AND DATA (MD)

K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	48 TO 60 MONTHS	BY 60 MONTHS

APPROACHES TO LEARNING (P-ATL)

P-ATL 8. Child holds information in mind and manipulates it to perform tasks.

Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.

P-ATL 9. Child demonstrates flexibility in thinking and behavior.

Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

NEXT GENERATION SCIENCE STANDARDS

K-PS3-1	Make observations to determine the effect of sunlight on Earth's surface

VISUAL SENSE

SKILLS INVENTORY

Demonstrates refinement and understanding of visual concepts (dimension, size, thickness, length, color, shape) through ordering, pairing, comparing, and vocabulary.

MONTESSORI LESSONS	PURPOSE
Cylinder Blocks • One at a Time • Two at a Time • Three at a Time • All Four Blocks • Distance Games	• Visual discrimination of dimensions. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To correctly name shapes regardless of their overall size. • To identify three-dimensional shapes. • Indirect preparation for handwriting: how to hold a writing instrument. • Indirect refinement of voluntary movement. • Indirect preparation of the mathematical mind. • Indirect preparation for mathematics.
Pink Tower • Introduction • Unit of Measure	• Visual discrimination of dimension: size (changes in all three dimensions). • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To describe objects in the environment using the names of the shapes. • To correctly name shapes regardless of overall size. • To identify three-dimensional shapes. • Indirect refinement of voluntary movement. • Indirect muscular education of grip. • Indirect preparation of the mathematical mind. • Indirect preparation for mathematics.
Brown Stairs • Introduction • Unit of Measure • Distance Game	• Visual discrimination of dimension: thickness. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To describe objects in the environment using the names of the shapes. • To correctly name shapes regardless of their overall size. • To identify three-dimensional shapes. • Indirect refinement of voluntary movement. • Indirect education of muscular grip. • Indirect preparation of mathematical mind. • Indirect preparation for mathematics (numbers move from 1-10 by increments of exactly 1).

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MONTESSORI LESSONS	PURPOSE
Red Rods • Introduction • Unit of Measure • Distance Game	• Visual discrimination of dimension: length. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To correctly name shapes regardless of their overall size. • Indirect preparation for mathematics (numbers move from 1-10 by increments of exactly 1).
Color Tablets • One • Two • Three • Distance Game	• To give the keys to the world of color. • To develop the chromatic perception. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories.
Geometry Cabinet • Introducing the Contrasts • One Drawer • Card Activities • Distance Game	• Discrimination of shape (or form). • Enhancement of visual memory. • Preparation for mathematics: geometry. • Preparation for writing: The three-fingered grip for holding a writing instrument. • Following a contour when using a writing instrument. • Firmness of touch when using a writing instrument. • Visual discrimination of shape. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories. • To describe objects in the environment using the names of the shapes. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify two-dimensional shapes.
The Roman Arch	• Visual discrimination of shape. • Enhancement of visual memory. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To identify three-dimensional shapes.

ASSESSMENT VOCABULARY

attribute	number	**Cognitive Verbs**
category	orientation	analyze
compare	part	build
component	plane	classify
compose	shape	compare
corner	side	compose
count	similarity	describe
difference	size	form
equal	solid	identify
informal	three-dimensional	name
large/larger	two-dimensional	sort
length	sort	
less	vertex/vertices	
model	weight	
more		

ASSESSMENT CONSIDERATIONS

Students will be asked to:
- Describe the measurable attributes of objects. (K.MD.A.1)
- Compare two objects with a measurable attribute in common. (K.MD.A.2)
- Classify objects into categories. (K.MD.B.3)
- Describe objects in the environment using the names of the shapes. (K.G.B.1)
- Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.B.1)
- Correctly name shapes regardless of their orientation. (K.G.B.2)
- Correctly name shapes regardless of their overall size. (K.G.B.2)
- Identify two-dimensional shapes. (K.G.B.3)
- Identify three-dimensional shapes. (K.G.B.3)
- Use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. (K.G.B.4)
- Build shapes from components (e.g. Montessori materials, sticks and clay balls). (K.G.B.5)
- Draw shapes. (K.G.B.5)
- Compose simple shapes to form larger shapes. (K.G.B.6)

COMMON CORE STATE STANDARDS (CCSS.MATH.CONTENT)

MEASUREMENT AND DATA (MD)

K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

GEOMETRY (G)

K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6	Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

EDUCATION OF THE SENSES

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS		
DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	48 TO 60 MONTHS	BY 60 MONTHS
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.
P-ATL 9. Child demonstrates flexibility in thinking and behavior.		
Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

EDUCATION OF THE SENSES

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

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HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

MATHEMATICS DEVELOPMENT (P-MATH)

P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.

With adult support, begins to understand that attributes can be compared, such as one child can be taller than another child.	With some adult support, uses measurable attributes to make comparisons, such as identifies objects as the same/different and more/less.	• Measures using the same unit, such as putting together snap cubes to see how tall a book is. • Compares or orders up to 5 objects based on their measurable attributes, such as height or weight. • Uses comparative language, such as shortest, heavier, or biggest.

P-MATH 9. Child identifies, describes, compares, and composes shapes.

Recognizes and names typical circle, square, and sometimes a triangle. With adult support, matches some shapes that are different sizes and orientations.	Recognizes and compares a greater number of shapes of different sizes and orientations. Begins to identify sides and angles as distinct parts of shapes.	• Names and describes shapes in terms of length of sides, number of sides, and number of angles. • Correctly names basic shapes regardless of size and orientation. • Analyzes, compares and sorts two and three-dimensional shapes and objects in different sizes. Describes their similarities, differences, and other attributes, such as size and shape. • Creates and builds shapes from components.

EDUCATION OF THE SENSES

STEREOGNOSTIC SENSE

SKILLS INVENTORY

Demonstrates refinement and understanding of stereognostic concepts through ordering, pairing, comparing, and vocabulary.

MONTESSORI LESSONS	PURPOSE
Geometric Solids • Introduction • Stereognostic Game • Solids and Bases	• Refinement of stereognostic perception. • To help the child become aware of the solid geometric forms around him. • Mental visualization. • To describe objects in the environment using the names of the shapes. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To identify three-dimensional shapes. • To use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • Indirect preparation for mathematics and geometry.
Sorting • One • Two • Three	• Further refinement of the stereognostic perception. • Mental visualization.
Mystery Bag	• Further refinement of the stereognostic perception. • Mental visualization.
Teacher-Created Lessons • Building Shapes	• To compose simple shapes to form larger shapes.

ASSESSMENT VOCABULARY

attribute	orientation	**Cognitive Verbs**
compare	part	analyze
component	plane	build
compose	shape	compare
corner	side	compose
difference	similarity	describe
equal	size	form
informal	solid	identify
large/larger	three-dimensional	name
length	two-dimensional	
model	vertex/vertices	

ASSESSMENT CONSIDERATIONS

Students will be asked to:

- Describe objects in the environment using the names of the shapes. (K.G.B.1)
- Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.B.1)
- Correctly name shapes regardless of their orientation. (K.G.B.2)
- Correctly name shapes regardless of their overall size. (K.G.B.2)
- Identify three-dimensional shapes. (K.G.B.3)
- Use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. (K.G.B.4)
- Build shapes from components (e.g. Montessori materials, sticks and clay balls). (K.G.B.5)
- Compose simple shapes to form larger shapes. (K.G.B.6)

COMMON CORE STATE STANDARDS (CCSS.MATH.CONTENT)

GEOMETRY (G)

K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6	Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	48 TO 60 MONTHS	BY 60 MONTHS
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

P-ATL 9. Child demonstrates flexibility in thinking and behavior.

Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

continues

EDUCATION OF THE SENSES

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

continues

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

MATHEMATICS DEVELOPMENT (P-MATH)

P-MATH 9. Child identifies, describes, compares, and composes shapes.

Recognizes and names typical circle, square, and sometimes a triangle. With adult support, matches some shapes that are different sizes and orientations.	Recognizes and compares a greater number of shapes of different sizes and orientations. Begins to identify sides and angles as distinct parts of shapes.	• Names and describes shapes in terms of length of sides, number of sides, and number of angles. • Correctly names basic shapes regardless of size and orientation. • Analyzes, compares and sorts two and three-dimensional shapes and objects in different sizes. Describes their similarities, differences, and other attributes, such as size and shape. • Creates and builds shapes from components.

EDUCATION OF THE SENSES

AUDITORY SENSE

SKILLS INVENTORY

- Demonstrates refinement and understanding of auditory concepts (volume, timbre, pitch) through ordering, pairing, comparing, and vocabulary.

MONTESSORI LESSONS	PURPOSE
Sound Boxes • Pairing • Grading	• Refinement of the auditory perception of volume. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories.
Timbre Game	• Experience that there a different tone colors (timbres) to different things. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common.
Bells • Listening to One Bell • Pairing the Diatonic Scale • Grading the Diatonic Scale • Naming Diatonic Pitches • Pentatonic Scale • Chromatic Scale	• Development and refinement of auditory discrimination for pitch. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories. • Indirect preparation for musical education.
Musical Instruments	• Experience with a different musical instruments. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories.

ASSESSMENT VOCABULARY

attribute	less	**Cognitive Verbs**
category	more	classify
compare	number	compare
count	sort	describe
difference	weight	sort
length		

ASSESSMENT CONSIDERATIONS

Students will be asked to:

- Describe the measurable attributes of objects. (K.MD.A.1)
- Compare two objects with a measurable attribute in common. (K.MD.A.2)
- Classify objects into categories. (K.MD.B.3)

COMMON CORE STATE STANDARDS

MEASUREMENT AND DATA (MD)

K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	48 TO 60 MONTHS	BY 60 MONTHS
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

P-ATL 9. Child demonstrates flexibility in thinking and behavior.

Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

EDUCATION OF THE SENSES

OLFACTORY SENSE

SKILLS INVENTORY

Demonstrates refinement and understanding of olfactory concepts through ordering, pairing, comparing, and vocabulary.

MONTESSORI LESSONS	PURPOSE
Smelling Bottles • Pairing • Ordering by Preference	• Refinement of the olfactory sense. • The awareness of scent in the environment. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories.

ASSESSMENT VOCABULARY

attribute	less	**Cognitive Verbs**
category	more	classify
compare	number	compare
count	sort	describe
difference	weight	sort
length		

ASSESSMENT CONSIDERATIONS

Students will be asked to:
• Describe the measurable attributes of objects. (K.MD.A.1)
• Compare two objects with a measurable attribute in common. (K.MD.A.2)
• Classify objects into categories. (K.MD.B.3)

COMMON CORE STATE STANDARDS	
MEASUREMENT AND DATA (MD)	
K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS		
DEVELOPMENTAL PROGRESSION		**INDICATORS**
36 TO 48 MONTHS	**48 TO 60 MONTHS**	**BY 60 MONTHS**
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.
P-ATL 9. Child demonstrates flexibility in thinking and behavior.		
Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

continues

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

continues

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

GUSTATORY SENSE

SKILLS INVENTORY

Demonstrates refinement and understanding of gustatory concepts through ordering, pairing, comparing, and vocabulary.

MONTESSORI LESSONS	PURPOSE
Tasting Jars • Pairing • Ordering by Preference	• To refine the gustatory sense. • Isolation of the gustatory sense to develop an awareness of the five fundamental tastes. • To describe the measurable attributes of objects. • To compare two objects with a measurable attribute in common. • To classify objects into categories.

ASSESSMENT VOCABULARY

attribute	less	**Cognitive Verbs**
category	more	classify
compare	number	compare
count	sort	describe
difference	weight	sort
length		

ASSESSMENT CONSIDERATIONS

Students will be asked to:
• Describe the measurable attributes of objects. (K.MD.A.1)
• Compare two objects with a measurable attribute in common. (K.MD.A.2)
• Classify objects into categories. (K.MD.B.3)

COMMON CORE STATE STANDARDS

MEASUREMENT AND DATA (MD)

K.MD.A.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.
K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	48 TO 60 MONTHS	BY 60 MONTHS
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.
P-ATL 9. Child demonstrates flexibility in thinking and behavior.		
Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

continues

EDUCATION OF THE SENSES

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

continues

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

SCIENTIFIC REASONING (P-SCI)

P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).

Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.	Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.	• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations. • Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope. • Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky. • Represents observable phenomena with pictures, diagrams, and 3-D models.

P-SCI 3. Child compares and categorizes observable phenomena.

Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

MIXED IMPRESSIONS

SKILLS INVENTORY

Demonstrates refinement and understanding of concepts of geometry (two-dimensional and three-dimensional shapes and objects) through ordering, pairing, comparing, building, and vocabulary regardless of size and orientation.

MONTESSORI LESSONS	PURPOSE
Constructive Triangles • Introduction • Rectangle Box • Blue Triangle Box • Triangular Box • Small Hexagonal Box • Large Hexagonal Box	• To show that most shapes can be constructed by combinations of different types of triangles. • To show that two triangles form quadrilaterals when equal sides are matches. • Preparation to show that all plane geometric figures constructed with straight lines are made with triangles. • To show the constructive power of the triangle by exploring all possible shapes using two triangles. • To realize that an equilateral triangle can be subdivided into other types of triangles. • To show that a regular hexagon is composed of 6 equilateral triangles, three rhombi, and two trapezoids. • To show what figures can be built with an obtuse-angled isosceles triangle that is 1/3 the size of an equilateral triangle. • To describe objects in the environment using the names of the shapes. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify two-dimensional shapes. • To use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To draw shapes. • To compose simple shapes to form larger shapes.

MONTESSORI LESSONS	PURPOSE
Knobless Cylinders • One Box • Two Boxes Together • Three Boxes Together • Four Boxes Together	• To observe and compare the relationships within and among the different series. • To describe objects in the environment using the names of the shapes. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify three-dimensional shapes. • To use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To draw shapes.
Binomial Cube	• To build the binomial cube. • Indirect preparation for mathematics: the cube of a binomial. • Preparation for cube root. • Introduction to algebra and preparation for the expansion of the expression $(a+b)^3$. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify three-dimensional shapes. • To use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To compose simple shapes to form larger shapes.

continues

MONTESSORI LESSONS	PURPOSE
Trinomial Cube • Building from Separate Layers • Building from Mixed Layers • Building Outside the Box • Building Three Layers Separately • Parade of Colors	• To build the trinomial cube. • Indirect preparation for mathematics: the cube of a trinomial (cubing a quantity with three factors). • Preparation for cube root. • Preparation to understand the expression $(a+b+c)^3$ at the elementary level. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify three-dimensional shapes. • To use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To compose simple shapes to form larger shapes.
Decanomial Cube	• Building squares. • Indirect preparation for mathematics: squaring. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify two-dimensional shapes. • To use language describing parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To draw shapes. • To compose simple shapes to form larger shapes.

MONTESSORI LESSONS	PURPOSE
Superimposed Geometric Figures • Concentric Figures • Tangential Figures • Inscribed Figures	• To explore the relationships between and among geometric shapes. • To describe objects in the environment using the names of the shapes. • To describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. • To correctly name shapes regardless of their orientation. • To correctly name shapes regardless of their overall size. • To identify two-dimensional shapes. • To use language describing parts and attributes to compare the similarities and differences of two dimensional shapes. • To build shapes from components (e.g. Montessori materials, sticks and clay balls). • To draw shapes. • To compose simple shapes to form larger shapes.

ASSESSMENT VOCABULARY

attribute	orientation	**Cognitive Verbs**
compare	part	analyze
component	plane	build
compose	shape	compare
corner	side	compose
difference	similarity	describe
equal	size	form
informal	solid	identify
large/larger	three-dimensional	name
length	two-dimensional	
model	vertex/vertices	

ASSESSMENT CONSIDERATIONS

Students will be asked to:

- Describe objects in the environment using the names of the shapes. (K.G.B.1)
- Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.B.1)
- Correctly name shapes regardless of their orientation. (K.G.B.2)
- Correctly name shapes regardless of their overall size. (K.G.B.2)
- Identify two-dimensional shapes. (K.G.B.3)
- Identify three-dimensional shapes. (K.G.B.3)
- Use language describing their parts and attributes to compare the similarities and differences of two- and three-dimensional shapes. (K.G.B.4)
- Build shapes from components (e.g. Montessori materials, sticks and clay balls). (K.G.B.5)
- Draw shapes. (K.G.B.5)
- Compose simple shapes to form larger shapes. (K.G.B.6)

COMMON CORE STATE STANDARDS (CCSS.MATH.CONTENT)

GEOMETRY (G)

K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
K.G.B.6	Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

DEVELOPMENTAL PROGRESSION		INDICATORS
36 TO 48 MONTHS	**48 TO 60 MONTHS**	**BY 60 MONTHS**
APPROACHES TO LEARNING (P-ATL)		
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.		
Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.	Holds an increasing amount of information in mind in order to successfully complete tasks.	• Accurately recounts recent experiences in the correct order and includes relevant details. • Successfully follows detailed, multi-step directions, sometimes with reminders • Remembers actions to go with stories or songs shortly after being taught.
P-ATL 9. Child demonstrates flexibility in thinking and behavior.		
Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.	Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.	• Tries different strategies to complete work or solve problems including with other children. • Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet. • Transitions between activities without getting upset.

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

PERCEPTUAL, MOTOR AND PHYSICAL DEVELOPMENT (P-PMP)

P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.	Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.	• Demonstrates awareness of own body and other people's space during interactions. • Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball. • When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children. • Changes directions when moving with little difficulty

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.	Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.	• Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together. • Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting. • Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.

continues

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS

MATHEMATICS DEVELOPMENT (P-MATH)

P-MATH 7. Child understands simple patterns.

Recognizes a simple pattern, and with adult assistance, fills in the missing element of a pattern, such as boy, girl, boy, girl, ___, girl. Duplicates and extends ABABAB patterns.	Creates, identifies, extends, and duplicates simple repeating patterns in different forms, such as with objects, numbers, sounds, and movements.	• Fills in missing elements of simple patterns. • Duplicates simple patterns in a different location than demonstrated, such as making the same alternating color pattern with blocks at a table that was demonstrated on the rug. Extends patterns, such as making an eight block tower of the same pattern that was demonstrated with four blocks. • Identifies the core unit of sequentially repeating patterns, such as color in a sequence of alternating red and blue blocks.

P-MATH 9. Child identifies, describes, compares, and composes shapes.

Recognizes and names typical circle, square, and sometimes a triangle. With adult support, matches some shapes that are different sizes and orientations.	Recognizes and compares a greater number of shapes of different sizes and orientations. Begins to identify sides and angles as distinct parts of shapes.	• Names and describes shapes in terms of length of sides, number of sides, and number of angles. • Correctly names basic shapes regardless of size and orientation. • Analyzes, compares and sorts two and three-dimensional shapes and objects in different sizes. Describes their similarities, differences, and other attributes, such as size and shape. • Creates and builds shapes from components.

continues

EDUCATION OF THE SENSES

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK (HELOF) GOALS		
P-MATH 10. Child explores the positions of objects in space.		
Begins to understand spatial vocabulary. With adult support, follows directions involving their own position in space, such as "Stand up and stretch your arms to the sky."	Increasingly understands spatial vocabulary. Follows directions involving their own position in space, such as "Move to the front of the line."	• Understands and uses language related to directionality, order, and the position of objects, including up/down, and in front/behind. • Correctly follows directions involving their own position in space, such as "Stand up" and "Move forward."

CHAPTER 2
GEOGRAPHY

PHYSICAL GEOGRAPHY

SKILLS INVENTORY

- Identifies air, land and water including continents and oceans of the world and types of landforms and water forms.
- Identifies weather as the combination of sunlight, wind, snow or rain and understands how weather impacts the earth.
- Demonstrates understanding that temperature varies by region and time of year.

MONTESSORI LESSONS	PURPOSES
AIR, LAND AND WATER	
Air, Land and Water	• To recognize air, land, and water. • To demonstrate an understanding that sunlight warms Earth's surface. • Preparation for the later study of physical geography.
Globes • Land and Water Globe (Sandpaper) • Continent Globe (Painted)	• A sensorial and visual representation for geography, showing the relationship between the land and water areas of the world. • To demonstrate an understanding that sunlight warms Earth's surface. • Preparation for the later study of physical geography.
Land and Water Forms • Models • Three Part Cards	• To bring awareness of land and water forms. • To learn vocabulary of land and water forms. • To transfer concrete knowledge of land and water forms to more abstract knowledge. • Preparation for the later study of physical geography.

continues

GEOGRAPHY

MONTESSORI LESSONS	PURPOSES
WEATHER AND CLIMATE	
Teacher-Created Lessons For: • Sun • Wind, Snow, Rain • Temperature • Weather conditions • Weather, Plants and Animals	• To understand weather and how it impacts the earth. • To demonstrate an understanding that sunlight warms Earth's surface. • To understand that weather is the combination of sunlight, wind, snow or rain. • To understand that temperature varies in regions at particular times. • To understand that people measure weather conditions to describe and record the weather and to notice patterns over time. • To understand that plants and animals can change their environment. • To understand that some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. • To ask questions based on observations to find more information about the designed world. • To make observations (firsthand or from media) to collect data that can be used to make comparisons. • To use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. • To use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem. • To read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world. • To construct an argument with evidence to support a claim.

ASSESSMENT VOCABULARY

area	region	**Cognitive Verbs**
canopy	rock	ask
cloudy	severe weather	build
combination	soil	create
cool (adjective)	structure	describe
Earth's surface	sun	design
forecast	sunlight	determine
form (noun)	temperature	gather
local	warm (adjective)	measure
material (noun)	warm (verb)	obtain
qualitative	weather	prepare
quantitative	weather forecasting	record
rain	weather scientist	reduce
rainy	wind	respond
		share

ASSESSMENT CONSIDERATIONS

Students will be asked to demonstrate understanding that:

- Sunlight warms Earth's surface. (K-PS3-1),(K-PS3-2)
- Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time.
- People measure these conditions to describe and record the weather and to notice patterns over time. (K-ESS2-1)
- Plants and animals can change their environment. (K ESS2-2)
- Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. (K-ESS3-2)

Students will be asked to:

Science and Engineering Practices

- Ask questions based on observations to find more information about the designed world. (K-ESS3-2)
- Make observations (firsthand or from media) to collect data that can be used to make comparisons. (K-PS3-1)
- Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (K-ESS2-1)
- Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem. (K-PS3- 2)
- Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world. (K-ESS3-2)
- Construct an argument with evidence to support a claim. (K-ESS2-2)

GEOGRAPHY

COLLEGE, CAREER AND CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES	
GEOPGRAPHY (D2.GEO)	
GEOGRAPHIC REPRESENTATIONS: SPATIAL VIEWS OF THE WORLD	
Geo.3.K-2	Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.
HUMAN-ENVIRONMENT INTERACTION: PLACE, REGIONS, AND CULTURE	
Geo.4.K-2	Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.

NEXT GENERATION SCIENCE STANDARDS	
PHYSICAL SCIENCE (PS)	
ENERGY	
K-PS3-1	Make observations to determine the effect of sunlight on Earth's surface.
K-PS3-2	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.
EARTH AND SPACE SCIENCE (ESS)	
EARTH'S SYSTEMS	
K-ESS2-1	Use and share observations of local weather conditions to describe patterns over time.
EARTH AND HUMAN ACTIVITY	
K-ESS3-2	Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

NOTES

POLITICAL GEOGRAPHY

SKILLS INVENTORY

- Understands the different uses for globes and maps
- Identifies the political geography of the world including continents and countries.
- Identifies the flags of the world.

MONTESSORI LESSONS	PURPOSES
Puzzle Maps • From Maps to Globes • World Map of the Continents • Individual Continent Maps	• Sensorial preparation for an awareness of the civilization, history, geography, and anthropology of different parts of the world. • Preparation for the later study of geography. • To ask geographic questions about where places are located and why they are located there. • To use location terms and geographic representations, such as maps, photographs, satellite images, and models.

Map Making
• World Map
  • Tracing
  • Push Pins
• Continent Map
  • Tracing
	• To further interest the child in the study of geography.
	• To ask geographic questions about where places are located and why they are located there.
	• To use location terms and geographic representations, such as maps, photographs, satellite images, and models.

Mapping **Make a Map and Use a Map** • The Model Town or Farm	• To further interest the child in the study of geography. • To ask geographic questions about where places are located and why they are located there. • To use location terms and geographic representations, such as maps, photographs, satellite images, and models.
Geography Folders	• To relay the idea that there are cultural differences and similarities. • To further interest the child in the study of geography. • To ask geographic questions about where places are located and why they are located there. • To use location terms and geographic representations, such as maps, photographs, satellite images, and models. • To identify natural events or physical features, such as land, water, air, and wind.

continues

MONTESSORI LESSONS	PURPOSES
Flags **Matching Flags to their Countries** • Introduction to the Parts of a Flag	• Association of flags with their country and further appreciation of cultural differences of the countries of the world. • To further interest the child in the study of geography.
Biomes of the Earth **Teacher-Created Lesson**	• To identify natural events or physical features, such as land, water, air, and wind.
Environmental Impact **Teacher-Created Lesson**	• To describe how the environment affects activities. • To identify a pattern. • To identify a human activity that changed a place.

GEOGRAPHY

COLLEGE, CAREER AND CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES
GEOGRAPHY (D2.GEO)

GEOGRAPHIC REPRESENTATIONS: SPATIAL VIEWS OF THE WORLD	
Geo.1.K-2	Construct maps, graphs, and other representations of familiar places.
Geo.2.K-2	Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.
Geo.3.K-2	Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

HUMAN-ENVIRONMENT INTERACTION: PLACE, REGIONS, AND CULTURE	
Geo.4.K-2	Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.
Geo.5.K-2	Describe how human activities affect the cultural and environmental characteristics of places or regions
Geo.6.K-2	Identify some cultural and environmental characteristics of specific places.

continues

COLLEGE, CAREER AND CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES

HUMAN POPULATION: SPATIAL PATTERNS AND MOVEMENTS

Geo.7.K-2	Explain why and how people, goods, and ideas move from place to place.
Geo.8.K-2	Compare how people in different types of communities use local and distant environments to meet their daily needs.
Geo.9.K-2	Describe the connections between the physical environment of a place and the economic activities found there.

GLOBAL INTERCONNECTIONS: CHANGING SPATIAL PATTERNS

Geo.10.K-2	Describe changes in the physical and cultural characteristics of various world regions.
Geo.11.K-2	Explain how the consumption of products connects people to distant places.
Geo.12.K-2	Identify ways that a catastrophic disaster may affect people living in a place.

INDEXES

STANDARDS TO MONTESSORI INDEX

COLLEGE, CAREER AND CIVIC LIFE (C3) FRAMEWORK FOR STATE SOCIAL STUDIES STANDARDS		
GEOGRAPHY (D2.GEO)		
GEOGRAPHIC REPRESENTATIONS: SPATIAL VIEWS OF THE WORLD		
Geo.1.K-2	Construct maps, graphs, and other representations of familiar places.	**Geography** • Political Geography
Geo.2.K-2	Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.	
Geo.3.K-2	Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.	**Geography** • Physical Geography • Political Geography
HUMAN-ENVIRONMENT INTERACTION: PLACE, REGIONS, AND CULTURE		
Geo.4.K-2	Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.	**Geography** • Political Geography
Geo.5.K-2	Describe how human activities affect the cultural and environmental characteristics of places or regions	
Geo.6.K-2	Identify some cultural and environmental characteristics of specific places.	

continued

COLLEGE, CAREER AND CIVIC LIFE (C3) FRAMEWORK FOR STATE SOCIAL STUDIES STANDARDS

HUMAN POPULATION: SPATIAL PATTERNS AND MOVEMENTS

Geo.7.K-2	Explain why and how people, goods, and ideas move from place to place.	**Geography** • Political Geography
Geo.8.K-2	Compare how people in different types of communities use local and distant environments to meet their daily needs.	
Geo.9.K-2	Describe the connections between the physical environment of a place and the economic activities found there.	

GLOBAL INTERCONNECTIONS: CHANGING SPATIAL PATTERNS

Geo.10.K-2	Describe changes in the physical and cultural characteristics of various world regions.	**Geography** • Political Geography
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Geo.12.K-2	Identify ways that a catastrophic disaster may affect people living in a place.	

COMMON CORE STATE STANDARDS STRANDS, DIVISIONS, AND STANDARDS		MONTESSORI CHAPTERS AND SECTIONS
GEOMETRY (G)		
IDENTIFY AND DESCRIBE SHAPES		
K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	**Education of the Senses** • Visual Sense • Stereognostic Sense • Mixed Impressions
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.	
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	

continues

COMMON CORE STATE STANDARDS STRANDS, DIVISIONS, AND STANDARDS		MONTESSORI CHAPTERS AND SECTIONS
ANALYZE, COMPARE, CREATE, AND COMPOSE SHAPES		
K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	**Education of the Senses** • Visual Sense • Stereognostic Sense • Mixed Impressions
K.G.B.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	
K.G.B.6	Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"	
MEASUREMENT AND DATA (MD)		
DESCRIBE AND COMPARE MEASURABLE ATTRIBUTES		
K.G.A.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense • Mixed Impressions
K.G.A.2	Correctly name shapes regardless of their orientations or overall size.	
CLASSIFY OBJECTS AND COUNT THE NUMBER OF OBJECTS IN EACH CATEGORY.		
K.G.A.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense • Mixed Impressions

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK		MONTESSORI CHAPTERS AND SECTIONS
APPROACHES TO LEARNING (P-ATL)		
COGNITIVE SELF-REGULATION (EXECUTIVE FUNCTIONING)		
P-ATL 8	Child holds information in mind and manipulates it to perform tasks.	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense • Mixed Impressions • Also aligned in: **Practical Life: Foundations** • Overview of Practical Life
P-ATL 9	Child demonstrates flexibility in thinking and behavior.	
MATHEMATICS DEVELOPMENT (P-MATH)		
OPERATIONS AND ALGEBRAIC THINKING		
P-MATH-7	Child understands simple patterns.	**Education of the Senses** • Mixed Impressions
MEASUREMENT		
P-MATH-8	Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.	**Education of the Senses** • Visual Sense
GEOMETRY AND SPATIAL SENSE		
P-MATH-9	Child identifies, describes, compares, and composes shapes.	**Education of the Senses** • Visual Sense • Stereognostic Sense • Mixed Impressions
P-MATH-10	Child explores the positions of objects in space.	**Education of the Senses** • Mixed Impressions **Also aligned in:** **Practical Life:** **Practical Life** • Control and Coordination of Movement

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK		MONTESSORI CHAPTERS AND SECTIONS
SCIENTIFIC REASONING (P-SCI)		
SCIENTIFIC INQUIRY		
P-SCI-1	Child observes and describes observable phenomena (objects, materials, organisms, and events).	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense **Also Aligned in:** **Science:** **Biology** • Biology **Physical Science** • Physical Science **Appendix** • Applications of Science
P-SCI-2	Child engages in scientific talk.	
P-SCI-3	Child compares and categorizes observable phenomena.	
PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT (P-PMP)		
GROSS MOTOR		
P-PMP-2	Child uses perceptual information to guide motions and interactions with objects and other people.	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense • Mixed Impressions • Also Aligned in: **Practical Life:** **Practical Life** • Control and Coordination of Movement

HEAD START EARLY LEARNING OUTCOMES FRAMEWORK	MONTESSORI CHAPTERS AND SECTIONS
FINE MOTOR	
P-PMP-3 Child demonstrates increasing control, strength, and coordination of small muscles.	**Education of the Senses** • Auditory Sense • Olfactory Sense • Gustatory Sense • Visual Sense • Stereognostic Sense • Tactile Sense • Mixed Impressions **Also Aligned in:** **Practical Life:** **Foundations** • Preliminary Exercises **Art Skills** • Art Skills **Practical Life** • Care of Self • Care of the Environment

NEXT GENERATION SCIENCE STANDARDS STRANDS, DIVISIONS, AND STANDARDS	MONTESSORI CHAPTERS AND SECTIONS
PHYSICAL SCIENCE (PS)	
ENERGY	
K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface	**Education of the Senses** • Visual Sense • Tactile Sense

MONTESSORI TO STANDARDS INDEX

CHAPTER AND SECTION	STANDARDS ALIGNED	
TACTILE SENSE		
Tactile Sense	CCSS.MATH.CONTENT	
	MD	**Measurement and Data** • Describe and compare measurable attributes • Classify objects and count the number of objects in each category
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
	NEXT GENERATION SCIENCE STANDARDS	
	PS	**Physical Science** • Energy

continues

INDEXES

CHAPTER AND SECTION	STANDARDS ALIGNED	
VISUAL SENSE		
Visual Sense	**CCSS.MATH.CONTENT**	
	MD	**Measurement and Data** • Describe and compare measurable attributes • Classify objects and count the number of objects in each category
	G	**Geometry** • Analyze, compare, create, and compose shapes • Identify and describe shapes
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
	P-MATH	**Mathematics Development** • Measurement • Geometry and Spatial Sense
STEREOGNOSTIC SENSE		
Stereognostic Sense	**CCSS.MATH.CONTENT**	
	G	**Geometry** • Analyze, compare, create, and compose shapes • Identify and describe shapes

INDEXES

CHAPTER AND SECTION	STANDARDS ALIGNED	
Stereognostic Sense	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
AUDITORY SENSE		
Auditory Sense	CCSS.MATH.CONTENT	
	MD	**Measurement and Data** • Describe and compare measurable attributes • Classify objects and count the number of objects in each category
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry

CHAPTER AND SECTION	STANDARDS ALIGNED	
OLFACTORY SENSE		
Olfactory Sense	CCSS.MATH.CONTENT	
	MD	**Measurement and Data** • Describe and compare measurable attributes • Classify objects and count the number of objects in each category
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
GUSTATORY SENSE		
Gustatory Sense	CCSS.MATH.CONTENT	
	MD	**Measurement and Data** • Describe and compare measurable attributes • Classify objects and count the number of objects in each category
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)

continues

CHAPTER AND SECTION	STANDARDS ALIGNED	
Gustatory Sense	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
MIXED IMPRESSIONS		
Mixed Impressions	CCSS.MATH.CONTENT	
	G	**Geometry** • Analyze, compare, create, and compose shapes • Identify and describe shapes
	HELOF APPROACHES TO LEARNING	
	P-ATL	**Approaches to Learning** • Cognitive Self-Regulation (Executive Functioning)
	HELOF PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT	
	P-PMP	**Perceptual, Motor, and Physical Development** • Gross Motor • Fine Motor
	HELOF COGNITION	
	P-SCI	**Scientific Reasoning** • Scientific Inquiry
	P-MATH	**Mathematics Development** • Measurement • Geometry and Spatial Sense

CHAPTER AND SECTION	STANDARDS ALIGNED	
GEOGRAPHY		
Physical Geography	**C3 FRAMEWORK**	
	D2.Geo	**Geography** • Geographic Representations: Spatial Views of the World • Human-Environment Interaction: Place, Regions, and Culture
	NEXT GENERATION SCIENCE STANDARDS	
	PS	**Physical Science** • Energy
	ESS	**Earth and Space Science** • Earth and Human Activity
	C3 FRAMEWORK	
	D2.Geo	**Geography** • Geographic Representations: Spatial Views of the World • Human-Environment Interaction: Place, Regions, and Culture • Place, Regions, and Culture • Human Population: Spatial Patterns and Movements • Global Interconnections: Changing Spatial Patterns