Building Blocks Pre-K Math
Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 1	• Math is numbers, shapes, and patterns • Counting tells how many • Math can be explored through materials • Groups can be named with numbers	• To count verbally • To explore the mathematics in manipulatives and materials • To recognize and make groups of 2 or more • To count verbally groups of 2 or more • To quickly recognize the number of objects in small groups (subitize)	
Week 2	• Introductory counting • Recognizing and making small groups • Exploring materials	• To name the number of objects in a group up to 3 • To count verbally groups of 2 or more with understanding • To make groups of one and two objects • To connect number words to the quantities they represent • To recognize and make groups of 2 or more • To produce simple rhythmic patterns • To quickly recognize the number of objects in small groups (subitize) • To recognize and make groups of 3 or more	
Week 3	• Counting and producing small groups • Recognizing equal groups • Duplicating rhythmic patterns	• To participate in rhythmic patterns • To connect number words to the quantities they represent • To make groups of up to five items • To count verbally to 5 with understanding • To count verbally to 10 with understanding	
Week 4	• Matching shapes • Shape recognition • Counting	• To name familiar two-dimensional shapes, such as circles and squares • To match the face of a three-dimensional object to its congruent two-dimensional outline • To match congruent shapes • To describe why certain figures are or are not circles • To verbally count to at least 10	
Week 5	• Recognizing two-dimensional shapes • Distinguishing among two-dimensional shapes • Subitizing	• To locate, name, and build familiar two-dimensional shapes, including triangles, rectangles, and squares • To distinguish between visually-similar non-examples of familiar two-dimensional shapes • To name the number of objects in a group up to 3	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Counting • Reciter • Reciter (10) • Corresponder • Counter (Small Numbers) ***Subitizing*** • Small Collection Namer			
	Counting • Reciter (10) • Corresponder • Counter (Small Numbers) • Producer (Small Numbers) ***Subitizing*** • Small Collection Namer • Maker of Small Collections • Perceptual Subitizer to 4			
	Counting • Reciter (10) • Counter (Small Numbers) • Producer (Small Numbers) ***Comparing Numbers*** • Perceptual Comparer			
	Counting • Reciter (10)		***2D Shapes*** • Shape Matcher, Identical, Orientations, and Sizes • Shape Recognizer, Typical • Shape Recognizer, Circles, Squares, and Triangles	
	Counting • Counter (Small Numbers) • Producer (Small Numbers) ***Subitizing*** • Maker of Small Collections • Perceptual Subitizer to 4		***2D Shapes*** • Shape Recognizer, All Rectangles • Shape Recognizer, More Shapes • Constructor of Shapes from Parts—Looks Like	

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 6	• Counting small groups of objects • Producing groups of a specific amount • Comparing and ordering small groups • Subitizing	• To participate in rhythmic patterns • To count verbally to 10 • To make groups of up to five items • To name the number of objects in a group up to 5 • To connect number words to the quantities they represent • To count with understanding to 5	
Week 7	• Counting to find out “how many?” • Comparing using one-to-one correspondence • Subitizing	• To produce a group of one to five objects • To make a group equal in number to another group using one-to-one correspondence • To count objects organized in a line up to 5 • To compare two groups to determine whether or not they have the same small number of objects	
Week 8	• Counting • One-to-one correspondence • Comparing numbers • Subitizing	• To produce a group of one to five objects • To make a group equal in number to another group using one-to-one correspondence • To count objects (or “steps” in a path) organized in a line up to 5 • To compare two groups to determine whether or not they have the same small number of objects • To quickly recognize the number of objects in a small group when shown only briefly	
Week 9	• Naming, describing, and matching shapes • Counting • Comparing numbers • Reading numerals	• To produce small numbers of actions • To distinguish between visually-similar non-examples of familiar two-dimensional shapes • To name and describe familiar two-dimensional shapes • To match congruent shapes by memory • To compare small numbers of objects after shown only briefly • To match the face of a three-dimensional object to its congruent two-dimensional outline	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Counting • Reciter (10) • Counter (Small Numbers) • Producer (Small Numbers) • Counter (10) ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5			
	Counting • Counter (Small Numbers) • Producer (Small Numbers) • Counter (10) ***Comparing Numbers*** • Matching Comparer • Counting Comparer (Same Size) • Counting Comparer (5) ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5			
	Counting • Counter (Small Numbers) • Producer (Small Numbers) • Counter (10) ***Comparing Numbers*** • Counting Comparer (Same Size) • Counting Comparer (5) ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5			
	Counting • Counter (Small Numbers) • Producer (Small Numbers) • Counter (10) • Counter and Producer (10+) ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5		***2D Shapes*** • Shape Matcher, Identical, Orientations, and Sizes • Shape Recognizer, All Rectangles • Shape Recognizer, More Shapes • Shape Identifier	

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 10	• Recognizing, naming, and sorting shapes • Putting together shapes • Counting • Comparing small numbers	• To name and describe familiar two-dimensional shapes • To distinguish between visually-similar non-examples of familiar two-dimensional shapes • To match congruent shapes by memory • To compare small numbers of objects after shown only briefly • To produce small numbers of actions • To identify rules used to sort shapes by their attributes	
Week 11	• Counting • Reading numerals • Connecting numerals to quantities • Comparing amounts and numbers	• To count objects (or “steps” on a path) organized in a line up to 5 or 10 • To recognize numerals and the quantities they represent • To compare small amounts • To connect counting to simple addition	
Week 12	• Counting objects to 10 • Numeral recognition • Sorting and classifying	• To recognize numerals and the quantities they represent • To compare small amounts • To sort and classify small groups • To count objects to 10 and beyond	
Week 13	• Counting • Ordering numbers and lengths • Patterning	• To order numbers and lengths • To count objects to 10 and beyond • To understand the plus 1 pattern in the counting sequence • To understand the plus 1 pattern in the counting sequence and how it relates to addition	
Week 14	• Shape identification • Shape matching • Shapes in the environment	• To identify and match shapes • To find and describe the shape of objects in their environments • To count objects to 10 and beyond	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Counting • Counter (Small Numbers)		***2D Shapes*** • Shape Matcher, Identical, Orientations, and Sizes • Shape Recognizer, All Rectangles • Side Recognizer • Shape Recognizer, More Shapes • Shape Identifier • Parts of Shapes Identifier ***Composing 2D Shapes*** • Piece Assembler • Picture Maker	
	Counting • Counter (Small Numbers) • Producer (Small Numbers) • Counter (10) ***Comparing Numbers*** • Counting Comparer (5) • Counting Comparer (10)	***Adding & Subtracting*** • Small Number +/−		
	Counting • Counter (10) • Counter and Producer (10+) • Counter Backward from 10 ***Comparing Numbers*** • Counting Comparer (10) • Mental Number Line to 10			
	Counting • Counter (10) • Counter and Producer (10+) • Counter Backward from 10 ***Comparing Numbers*** • Serial Orderer to 6+	***Adding & Subtracting*** • Small Number +/− ***Patterns, Structure, & Algebraic Thinking*** • Pattern Recognizer		
	Counting • Counter and Producer (10+) • Counter Backward from 10		***2D Shapes*** • Shape Matcher, More Shapes • Shape Matcher, Sizes and Orientations • Side Recognizer • Shape Recognizer, More Shapes • Shape Identifier	

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 15	• Shape matching • Shape identification • Adding and subtracting small numbers	• To name shapes and their parts and attributes • To find and describe the shape of objects in their environments • To count forward to and backward from 10 • To identify rules used to sort shapes by their attributes • To add and subtract small numbers	
Week 16	• Patterning • Counting	• To recognize, duplicate, and extend repeating patterns • To count beyond 10	
Week 17	• Patterning • Core units of patterns • Counting	• To recognize, duplicate, and extend repeating patterns • To recognize the core unit of repeating patterns • To count beyond 10	
Week 18	• Producing (counting out) items • Naming quickly an amount of items • Recognizing shapes and their attributes	• To name the number of objects in a group up to 5 or more • To produce a certain number of objects up to 10 • To recognize and name a variety of shapes	
Week 19	• Counting • Producing (counting out) items • Comparing amounts by counting • Ordering numbers	• To count objects to 10 and beyond • To produce a certain number of objects up to 10, keeping track of which objects have been counted even in nonstructured arrangements • To compare by counting • To order numbers	
Week 20	• Comparing amounts • Counting	• To directly compare amounts using words like *bigger* and *longer* • To order numbers and lengths • To count to 10 and beyond, focusing on identifying numbers just before or after a given number • To name the number of objects in a group of 5 or more	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Counting • Counter Backward from 10	***Adding & Subtracting*** • Small Number +/−	***2D Shapes*** • Shape Matcher, More Shapes • Shape Matcher, Sizes and Orientations • Side Recognizer • Shape Recognizer, More Shapes • Shape Identifier • Parts of Shapes Identifier	
	Counting • Counter and Producer (10+)	***Patterns, Structure, & Algebraic Thinking*** • Pattern Recognizer • Patterner AB • Patterner		
	Counting • Counter and Producer (10+)	***Patterns, Structure, & Algebraic Thinking*** • Patterner • Pattern Translator and Unit Recognizer		
	Counting • Counter (10) • Counter and Producer (10+) ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5 • Conceptual Subitizer to 10		***2D Shapes*** • Shape Recognizer, More Shapes • Shape Identifier • Parts of Shapes Identifier	
	Counting • Counter and Producer (10+) ***Comparing Numbers*** • Counting Comparer (10) • Serial Orderer to 6+			
	Counting • Counter and Producer (10+) • Counter Backward from 10 • Counter from N (N + 1, N − 1) ***Comparing Numbers*** • Serial Orderer to 6+ ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5 ***Composing Numbers*** • Composer to 4, then 5 • Composer to 7	***Adding & Subtracting*** • Small Number +/−		***Length*** • Length Direct Comparer • Indirect Length Comparer

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 21	• Comparing amounts • Measuring • Counting	• To directly compare amounts using words like *bigger* and *longer* • To measure by placing units of length end-to-end • To order numbers and lengths • To count to 10 and beyond, focusing on identifying numbers just before or after a given number • To name the number of objects in a group of 5 or more	
Week 22	• Comparing amounts • Measuring • Counting	• To measure by placing units of length end-to-end • To order numbers and lengths • To count to 10 and beyond, focusing on identifying numbers just before or after a given number	
Week 23	• Shape recognition and composition • Counting • Comparing and ordering numbers • Solving problems	• To identify and match shapes, including finding and describing object shapes in their environments • To compose shapes to make pictures and designs • To count forward to 10 and beyond and back to 0, focusing on identifying numbers just before or after a given number. • To identify rules used to sort shapes by their attributes	
Week 24	• Counting • Adding • Subitizing (two groups) • Shape composition	• To compose shapes to make pictures and designs • To count to and back from 10 and beyond • To add small numbers (sums to 5) • To quickly recognize the sum of two small groups	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Counting • Counter and Producer (10+) • Counter Backward from 10 • Counter from N (N + 1, N − 1) ***Comparing Numbers*** • Serial Orderer to 6+ ***Subitizing*** • Perceptual Subitizer to 5 • Conceptual Subitizer to 5 ***Composing Numbers*** • Composer to 4, then 5			**Length** • Indirect Length Comparer • End-to-End Length Measurer
	Counting • Counter and Producer (10+) • Counter Backward from 10 • Counter from N (N + 1, N − 1) ***Comparing Numbers*** • Counting Comparer (10) • Serial Orderer to 6+			***Length*** • End-to-End Length Measurer • Length Unit Relater and Repeater
	Counting • Counter Backward from 10 • Counter from N (N + 1, N − 1) ***Comparing Numbers*** • Serial Orderer to 6+		***2D Shapes*** • Shape Identifier • Parts of Shapes Identifier ***Composing 2D Shapes*** • Separate Shapes Actor (Foundations) • Piece Assembler • Picture Maker	***Classification & Data Analysis*** • Sorter by Similar Attributes
	Counting • Counter and Producer (10+) • Counter Backward from 10 ***Composing Numbers*** • Composer to 4, then 5 ***Subitizing*** • Conceptual Subitizer to 5	***Adding & Subtracting*** • Small Number +/−	***Composing 2D Shapes*** • Picture Maker	

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 25	• Adding • Counting • Shape composition	• To count to and back from 10 and beyond • To count to and back from 10 and beyond, focusing on identifying numbers just before or after a given number • To add small numbers (sums to 5) • To quickly recognize the sum of two small groups • To compose shapes to make pictures and designs	
Week 26	• Adding • Counting • Ordinal Numbers	• To count to and back from 10 and beyond • To add small numbers (sums to 5) • To quickly recognize the sum of two small groups • To compose and decompose numbers	
Week 27	• Shape recognition • Shape composition • Shape parts	• To compose shapes to make pictures and designs • To make shapes from their parts • To describe shapes in terms of their attributes	
Week 28	• Shape composition • Shape properties (attributes) • Shape parts	• To compose shapes to make pictures and designs • To make shapes from their parts • To describe shapes in terms of their attributes	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Comparing Numbers • Mental Number Line to 10 • Serial Orderer to 6+ ***Subitizing*** • Conceptual Subitizer to 5 ***Composing Numbers*** • Composer to 4, then 5 ***Counting*** • Counter Backward from 10 • Counter from N (N + 1, N − 1)	***Adding & Subtracting*** • Small Number +/− • Find Result +/−	***Composing 2D Shapes*** • Picture Maker	
	Comparing Numbers • Ordinal Counter ***Subitizing*** • Conceptual Subitizer to 5 ***Composing Numbers*** • Composer to 4, then 5 ***Counting*** • Counter Backward from 10 • Counter from N (N + 1, N − 1)	***Adding & Subtracting*** • Find Result +/− • Make It N • Find Change +/−		
			2D Shapes • Shape Identifier • Parts of Shapes Identifier • Constructor of Shapes from Parts—Exact ***Composing 2D Shapes*** • Piece Assembler • Picture Maker	***Classification & Data Analysis*** • Sorter by Similar Attributes
			2D Shapes • Parts of Shapes Identifier • Constructor of Shapes from Parts—Exact ***Composing 2D Shapes*** • Picture Maker • Shape Composer	

Scope and Sequence

Big Ideas & Objectives			
Week	**Big Ideas**	**Objectives**	
Week 29	• Adding • Number composition • Shape composition	• To add numbers • To quickly recognize the total number of two small groups • To compose shapes to make new shapes	
Week 30	• Adding • Number composition • Shape composition	• To compose numbers • To quickly recognize the total number of two small groups • To add numbers • To compose shapes to make new shapes	

	Learning Trajectories			
	Number	**Operations & Algebraic Thinking**	**Geometry**	**Measurement**
	Comparing Numbers • Counting Comparer (10) • Mental Number Line to 10 ***Composing Numbers*** • Composer to 4, then 5 • Composer to 7	***Adding & Subtracting*** • Find Result +/− • Make It N • Find Change +/− • Counting Strategies +/−	***Composing 2D Shapes*** • Shape Composer	
	Comparing Numbers • Counting Comparer (10) • Mental Number Line to 10 ***Subitizing*** • Conceptual Subitizer to 5 • Conceptual Subitizer to 10 • Conceptual Subitizer to 20 ***Composing Numbers*** • Composer to 4, then 5 • Composer to 7 • Composer to 10	***Adding & Subtracting*** • Find Result +/− • Make It N • Find Change +/−