Lesson Learning Quest	Concept/Skill	Common Core Standards	NCTM Standards
Learning Quest			
Lesson 1: Numbers 0 - 4 Lesson 2: Numbers 0 - 4 Review How can you use counting and one- to-one correspondence to recognize number symbols?	 Recognize numbers from 0 – 4 Use one-to-one correspondence for numbers 0 – 4 Count objects up to 4 Draw objects up to 4 	Counting and Cardinality Know number names and the count sequence. (Kindergarten) • Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to tell the number of objects. (Kindergarten) • Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. • Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. • Understand the relationship between numbers and quantities;	Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems (Pre-K – Grade 2) • Count with understanding and recognize "how many" in sets of objects • Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers • Connect number words and numerals to the quantities they represent, using various physical models and representations • Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers Communication (Pre-K – Grade 5) • Communicate mathematical thinking coherently and clearly • Use the language of mathematics to express mathematical ideas precisely

		connect counting to cardinality. Understand that each successive number name refers to a quantity that is one larger. • Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	
Lesson 3:	• Use word names	Counting and Cardinality	Number and Operations
Word Names 0 -	for $0-4$	Know number names and the count sequence.	Understand numbers, ways of representing numbers,
'	 Use word names for objects 0 – 4 	(Kindergarten)	relationships among numbers,
Lesson 4:	Draw objects that	• Write numbers from 0 to	and number systems
Word Names	correspond to the	20. Represent a number	(Pre-K – Grade 2)
0 - 4 Review	correct word	of objects with a written	Count with understanding
	name $(0-4)$	numeral 0-20 (with 0	and recognize "how many"
How can you use		representing a count of	in sets of objects
number words to represent		no objects). Count to tell the number of	Develop an understanding of the relative position and
numbers?		objects.	the relative position and magnitude of whole numbers
		(Kindergarten)	and of ordinal and cardinal
		Understand the	numbers
		relationship between	Connect number words and
		numbers and quantities;	numerals to the quantities
		connect counting to	they represent, using various
		cardinality. When	physical models and
		counting objects, say the number names in the	representations • Develop a sense of whole
		standard order, pairing	Develop a sense of whole numbers and represent and
		each object with one and	use them in flexible ways,
		only one number name	including relating,
		and each number name	composing, and
		with one and only one	decomposing numbers
		object.	Communication (Pre-K – Grade
		 Understand the relationship between 	5) Communicate methometical
		numbers and quantities;	Communicate mathematical thinking coherently and
		numbers and quantities,	thinking coherently and

		connect counting to cardinality. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. • Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that each successive number name refers to a quantity that is one larger.	• Use the language of mathematics to express mathematical ideas precisely
Lesson 5: Find the Missing Numbers 0 - 4 Lesson 6: Find the Missing Numbers 0 - 4 Review How can you use before, after and in between to find numbers?	 Use number line to find missing numbers from 0 – 4 Find numbers that come before, after, and between numbers from 0 – 4 	 Counting and Cardinality Know number names and the count sequence. (Kindergarten) Count to 100 by ones and by tens. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). 	 Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems (Pre-K – Grade 2) Count with understanding and recognize "how many" in sets of objects Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers Connect number words and numerals to the quantities they represent, using various physical models and representations Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers Algebra

Lesson 7: Numbers 0 - 10 Lesson 8: Numbers 0 - 10 Review How can you use counting and one-to-one correspondence to recognize number symbols?	 Recognize numbers from 5 - 10 Use one-to-one correspondence for numbers 0 - 10 Count objects up to 10 Draw objects up to 10 	Counting and Cardinality Know number names and the count sequence. (Kindergarten) Count to 100 by ones and by tens. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to tell the number of objects. (Kindergarten) Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name	 Understand patterns, relations, and functions (Pre-K – Grade 2) Sort, classify, and order objects by size, number, and other properties Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems (Pre-K – Grade 2) Count with understanding and recognize "how many" in sets of objects Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers Connect number words and numerals to the quantities they represent, using various physical models and representations Communication (Pre-K – Grade 5) Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely
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numbers?		objects	magnitude of whole numbers
numbers?		 Objects. (Kindergarten) Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. 	magnitude of whole numbers and of ordinal and cardinal numbers • Connect number words and numerals to the quantities they represent, using various physical models and representations • Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers Communication (Pre-K – Grade 5) • Communicate mathematical thinking coherently and clearly • Use the language of mathematics to express mathematical ideas precisely
Lesson 11:	Use number line	Counting and Cardinality	Number and Operations
Find the Missing Numbers 0 - 10	to find missing numbers from 0 –	Know number names and the count sequence.	Understand numbers, ways of representing numbers,
	10	(Kindergarten)	relationships among numbers,
Lesson12: Find the Missing	• Find numbers that come before,	• Count to 100 by ones and by tens.	and number systems (Pre-K – Grade 2)
Numbers 0 - 10 Review How can you use	after, and between numbers from 0 – 10	Count forward beginning from a given number within the known	Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal
before, after, and		sequence (instead of having to begin at 1).	numbers
between to find numbers?		• Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	 Connect number words and numerals to the quantities they represent, using various physical models and representations Develop a sense of whole

	<u> </u>	Count to tell the number of	numbers and represent and
		objects.	numbers and represent and use them in flexible ways,
		· ·	•
		(Kindergarten)	including relating,
		Understand the	composing, and
		relationship between	decomposing numbers
		numbers and quantities;	Compute fluently and make
		connect counting to	reasonable estimates
		cardinality. When	(Pre-K – Grade 2)
		counting objects, say the	Use a variety of methods and
		number names in the	tools to compute, including
		standard order, pairing	objects, mental computation,
		each object with one and	paper and pencil
		only one number name	Algebra
		and each number name	Understand patterns, relations,
		with one and only one	and functions
		object.	(Pre-K – Grade 2)
			Sort, classify, and order
			objects by size, number, and
			other properties
			Communication (Pre-K – Grade
			5)
			Communicate mathematical
			thinking coherently and
			clearly
			1
			Use the language of mathematics to express
			mathematics to express
T 12.	D :	C4:	mathematical ideas precisely
Lesson 13:	Recognize	Counting and Cardinality	Number and Operations
Bigger and	numbers from 11	Know number names and the	Understand numbers, ways of
Smaller Numbers	- 15 using	count sequence.	representing numbers,,
	objects and	(Kindergarten)	relationships among numbers,
Lesson14:	numbers	• Count to 100 by ones and	
Bigger and	• Use a number	by tens.	(Pre-K – Grade 2)
Smaller Numbers	line to find	 Count forward beginning 	Develop an understanding of
Review	missing numbers	from a given number	the relative position and
	from 0 – 15	within the known	magnitude of whole numbers
How can you use	• Find numbers	sequence (instead of	and of ordinal and cardinal
a number line to	that come before,	having to begin at 1).	numbers
recognize bigger	after, and	• Write numbers from 0 to	Connect number words and
and smaller	between numbers	20. Represent a number	numerals to the quantities
numbers?	from 0 – 15	of objects with a written	they represent, using various
	Compare and	numeral 0-20 (with 0	physical models and
	order numbers	representing a count of	representations
		no objects).	Develop a sense of whole
		Count to tell the number of	numbers and represent and
L	1	1	

Lesson 15: Recognizing Numbers 0 - 20 Lesson16:	•	Recognize numbers from 0 - 20 using objects and numbers Use a twenty	cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. • Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. Compare numbers. (Kindergarten) • Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. Counting and Cardinality Know number names and the count sequence. (Kindergarten)	 (Pre-K – Grade 2) Sort, classify, and order objects by size, number, and other properties Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely Number and Operations Understand numbers, ways of representing numbers, relationships among numbers,
	•	Use a twenty	• Count to 100 by ones and	and number systems
kecogn1z1ng				· ·
	1	missing numbers	 Count forward beginning 	 Develop an understanding of
Numbers 0 - 20				
Numbers 0 - 20				-
Numbers 0 - 20				-
Numbers 0 - 20				-
		from $0-20$	from a given number	the relative position and
Numbers 0 - 20				-
Numbers 0 - 20				-
Numbers 0 - 20				-
		minosing numbers		20,0100 001 0010015001101112 01
		missing numbers	 Count forward beginning 	 Develop an understanding of
	1			Develop on understanding of
Recognizing		chart to find	by tens.	(Pre-K – Grade 2)
	•		_	•
Loggon16.	_			
		and numbers	(Kindergarten)	relationships among numbers.
Numbers 0 - 20		20 using objects	count sequence.	representing numbers,,
	1			• •
		_		_
Lesson 15:	•	Recognize	Counting and Cardinality	Number and Operations
	<u> </u>		č č	
			using matching and	
	1		<u> </u>	
	1		number of objects in	
			=	
	1			
	1		group is greater than, less	
			<u> </u>	
	1		The state of the s	
			 Identify whether the 	
	1			
			-	
			, ,	
			out that many objects.	
	1		· ·	
	1		_	
	1			
			rectangular array, or a	
			arranged in a line, a	mathematical ideas precisely
			ě	mathematics to express
				_
			•	
			•	
			and each number name	
			<u> </u>	Communication (Pre-K – Grade
			_	
				<u> </u>
			_ ,	
			<u> </u>	(Pre-K – Grade 2)
			cardinality. When	and functions
			connect counting to	Understand patterns, relations,
			numbers and quantities;	Algebra
			relationship between	decomposing numbers
			Understand the	composing, and
			(Kindergarten)	including relating,
			· ·	
			objects.	use them in flexible ways,

a tryanty about to	often and	having to basin at 1)	numbara
a twenty chart to recognize bigger numbers?	after, and between numbers from 0 – 20	having to begin at 1). Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to tell the number of objects. (Kindergarten) Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name with one and only one object. Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. Understand the relationship between numbers and quantities; connect counting to cardinality. Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that each successive number name refers to a	 numbers Connect number words and numerals to the quantities they represent, using various physical models and representations Compute fluently and make reasonable estimates. (Pre-K – Grade 2) Use a variety of methods and tools to compute, including objects, mental computation, paper and pencil Algebra Understand patterns, relations, and functions (Pre-K – Grade 2) Sort, classify, and order objects by size, number, and other properties Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely
		quantity that is one	
		larger.	

Lesson 17: Comparing Numbers 0 - 20 Lesson 18: Comparing Numbers 0 - 20 Review How can you use greater and lesser to improve number sense?	 Tell whether a number is bigger or smaller (using objects) to 20 Put numbers in order using objects from smallest to biggest up to 20 Put numbers in order using objects from biggest to smallest up to 20 	as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. Compare numbers. (Kindergarten) • Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. Counting and Cardinality Know number names and the count sequence. (Kindergarten) • Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to tell the number of objects. (Kindergarten) • Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name	Number and Operations Understand numbers, ways of representing numbers,, relationships among numbers, and number systems (Pre-K – Grade 2) • Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers • Connect number words and numerals to the quantities they represent, using various physical models and representations Algebra Understand patterns, relations, and functions (Pre-K – Grade 2) • Sort, classify, and order objects by size, number, and other properties Communication (Pre-K – Grade
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		object. Compare numbers. (Kindergarten) • Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and	 Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely
Lesson 19: Make Ten using Objects Lesson 20: Make Ten using Objects Review How can you use the make ten strategy to add objects?	Use pictures and objects to make 10 Count up from a number to make the number 10	Counting and Cardinality Count to tell the number of objects. (Kindergarten) • Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name with one and only one object. Operations and Algebraic Thinking Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (Kindergarten) • For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Number and Operations Understand numbers, ways of representing numbers, relationships among numbers, and number systems (Pre-K – Grade 2) • Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers • Connect number words and numerals to the quantities they represent, using various physical models and representations Understand meanings of operations and how they relate to one another (Pre-K – Grade 2) • Understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations • Understand the effects of adding and subtracting whole numbers Compute fluently and make reasonable estimates. (Pre-K – Grade 2) • Use a variety of methods and tools to compute, including objects, mental computation,

			paper and pencil
			Develop and use strategies
			for whole-number
			computations, with a focus
			on addition and subtraction
			Develop fluency with basic
			number combinations for
			addition and subtraction
			Algebra
			Use mathematical models to
			represent and understand
			quantitative relationships
			(Pre-K – Grade 2)
			Model situations that involve the addition and subtraction
			of whole numbers, using
			objects, pictures, and
			symbols.
			Communication (Pre-K – Grade
			5)
			Communicate mathematical
			thinking coherently and
			clearly
			Use the language of
			mathematics to express
			mathematical ideas precisely
Lesson 21:	Use Concrete	Counting and Cardinality	Number and Operations
Using Pictures to	objects to solve	Know number names and the	Understand numbers, ways of
Add	addition	count sequence.	representing numbers,,
	problems	(Kindergarten)	relationships among numbers,
	Model addition	• Count to 100 by ones and	and number systems
Lesson 22:	as combining sets	by tens.	(Pre-K – Grade 2)
Using Pictures to	and adding to sets	Know number names and the	Develop an understanding of
Add	• Use the plus	count sequence.	the relative position and
Review	symbol (+) to	(Kindergarten)	magnitude of whole numbers
	show addition	• Count to 100 by ones and	and of ordinal and cardinal
How can you use		by tens.	numbers
pictures to add 0-		Count to tell the number of	Connect number words and
10?		objects.	numerals to the quantities
		(Kindergarten)	they represent, using various
		 Understand the 	physical models and
		relationship between	representations
		numbers and quantities;	Understand meanings of
		connect counting to	operations and how they relate
		cardinality. Understand	to one another

Correlation to The National Council of Teachers Mathematics and Common Core Standards

that each successive number name refers to a quantity that is one larger.

Operations and Algebraic Thinking

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
(Kindergarten)

- Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

(Pre-K – Grade 2)

- Understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations
- Understand the effects of adding and subtracting whole numbers

Compute fluently and make reasonable estimates. (Pre-K – Grade 2)

- Develop and use strategies for whole-number computations, with a focus on addition and subtraction
- Develop fluency with basic number combinations for addition and subtraction
- Use a variety of methods and tools to compute, including objects, mental computation, estimation, paper and pencil, and calculators

Algebra

Use mathematical models to represent and understand quantitative relationships (Pre-K – Grade 2)

 Model situations that involve the addition and subtraction of whole numbers, using objects, pictures, and symbols

Represent and analyze mathematical situations and structures using algebraic symbols

(Pre-K – Grade 2)

 Use concrete, pictorial, and verbal representations to develop an understanding of addition and subtraction symbols

Communication (Pre-K – Grade

Lesson 23: Identify Patterns Lesson 24: Identify Patterns Review How can you recognize AB and AAB patterns?	 Use shapes and pictures to represent patterns AB and AAB Use linking cubes to represent AB and AAB patterns Express the type of pattern using AB and AAB Fill in the end of a missing pattern AB and AAB 	Counting and Cardinality Count to tell the number of objects. (Kindergarten) • Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that each successive number name refers to a quantity that is one larger.	 Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely Algebra Understand patterns, relations, and functions (Pre-K – Grade 2) Sort, classify, and order objects by size, number, and other properties Recognize, describe, and extend patterns such as sequences of sounds and shapes or simple numeric patterns and translate from one representation to another. Analyze how both repeating and growing patterns are generated. Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely
Lesson 25: Identify Patterns Lesson 26: Identify Patterns Review How can you	 Use shapes and pictures to represent patterns ABC and ABB Use linking cubes to represent ABC and ABB patterns Express the type 	Counting and Cardinality Compare numbers. (Kindergarten) Compare two numbers between 1 and 10 presented as written numerals.	 Algebra Understand patterns, relations, and functions (Pre-K – Grade 2) Sort, classify, and order objects by size, number, and other properties Recognize, describe, and
recognize ABC and ABB patterns?	of pattern using ABC and ABB • Fill in the end of a missing pattern		extend patterns such as sequences of sounds and shapes or simple numeric patterns and translate from

	ABC and ABB		one representation to
			another.
			Analyze how both repeating
			and growing patterns are
			generated.
			Communication (Pre-K – Grade
			5)
			Communicate mathematical
			thinking coherently and
			clearly
			Use the language of
			mathematics to express
			mathematical ideas precisely
Lesson 27:	• Count tally montre	Counting and Cardinality	
Tally Marks	• Count tally marks up to 5	Counting and Cardinality Count to tell the number of	Number and Operations Understand numbers, ways of
Tally Warks	1	objects.	representing numbers,
	Recognize tally	(Kindergarten)	relationships among numbers,
Lesson 28:	marks and be	Understand the	and number systems
Tally Marks	able to write the	relationship between	(Pre-K – Grade 2)
Review	number (up to 5)	numbers and quantities;	• Count with understanding
Review	Write tally marks	connect counting to	and recognize "how many"
How can you use	to represent the	cardinality. When	in sets of objects
tally marks to	number of	counting objects, say the	·
represent the	objects (up to 5)	number names in the	
number of			numerals to the quantities
objects?		standard order, pairing	they represent, using various
objects:		each object with one and only one number name	physical models and
		and each number name	representations
		with one and only one	Data Analysis and Probability
		object.	Formulate questions that can be addressed with data and collect,
		Understand the	1
			organize and display data to
		relationship between	answer them
		numbers and quantities;	(Pre-K – Grade 2)
		connect counting to	Represent data using
		cardinality. Understand	concrete objects, pictures,
		that the last number name	and graphs
		said tells the number of	Communication (Pre-K – Grade
		objects counted. The	5)
		number of objects is the	Communicate mathematical
		same regardless of their	thinking coherently and
		arrangement or the order	clearly
		in which they were counted.	Use the language of
			mathematics to express
		• Count to answer "how	mathematical ideas precisely
		many?" questions about	

	1		
		as many as 20 things	
		arranged in a line, a	
		rectangular array, or a	
		circle, or as many as 10	
		things in a scattered	
		configuration; given a	
		number from 1–20, count	
		out that many objects.	
Lesson 29:	• Use a simple grid	Measurement and Data	Number and Operations
Bar Graphs	to represent a bar	Classify objects and count the	Understand numbers, ways of
	graph and color	number of objects in each	representing numbers,,
Lesson 30:	in the blocks	category.	relationships among numbers,
Bar Graphs	Use blocks to	(Kindergarten)	and number systems
Review	represent objects	Classify objects into	(Pre-K – Grade 2)
110 / 10 //	and line them up	given categories; count	 Develop an understanding of
How can you	-	the numbers of objects in	the relative position and
make a bar	to represent a bar	each category and sort	magnitude of whole numbers
graph?	graph		and of ordinal and cardinal
grapii:	• Use tally marks	the categories by count.	numbers
	to color in a grid	Represent and interpret data.	
	to represent a bar	(Grade 1)	Data Analysis and Probability
	graph	Organize, represent, and	Formulate questions that can be
		interpret data with up to	addressed with data and collect,
		three categories; ask and	organize and display data to
		answer questions about	answer them
		the total number of data	(Pre-K – Grade 2)
		points, how many in each	Pose questions and gather
		category, and how many	data about themselves and
		more or less are in one	their surroundings
		category than in another.	 Represent data using
		(Grade 2)	concrete objects, pictures,
		 Draw a picture graph and 	and graphs.
		a bar graph (with single-	Select and use appropriate
		unit scale) to represent a	statistical methods to analyze
		data set with up to four	data
		categories. Solve simple	(Pre-K – Grade 2)
		put-together, take-apart,	Describe parts of the data
		and compare problems ¹	and the set of data as a whole
		using information	to determine what the data
		presented in a bar graph.	show.
		Operations and Algebraic	Algebra
		Thinking	Understand patterns, relations,
		Understand addition as putting	and functions
		together and adding to, and	(Pre-K – Grade 2)
		understand subtraction as taking	,
		S	Sort and classify objects
		apart and taking from.	according to their attributes

Lesson 31: Use Length to Sort Objects Lesson 32: Use Length to Sort Objects Review How do I use the length of an object to sort it?	 Choose which object is longer Choose which object is shorter Build objects that are longer than a set object Build objects that are shorter than a set object 	 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. Counting and Cardinality Compare numbers. (Kindergarten) Compare two numbers between 1 and 10 presented as written numerals. Measurement and Data Describe and compare measurable attributes. (Kindergarten) Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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 organize data about the objects Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematics to express mathematical ideas precisely Measurement Understand measureable attributes of objects and the units, systems, and processes of measurement (Pre-K – Grade 2) Recognize the attributes of length Compare and order objects according to these attributes Understand how to measure using nonstandard and standard units Apply appropriate techniques, tools, and formulas to determine measurements (Pre-K – Grade 2) Use tools to measure Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematics lideas precisely
		directly compare the heights of two children and describe one child as taller/shorter.	<u> </u>
Lesson 33:	Compare two	Counting and Cardinality	Measurement
Compare Length	Compare two	Know number names and the	Understand measureable
Compare Length	objects using		
7 24	shorter and	count sequence.	attributes of objects and the
Lesson 34:	longer	(Kindergarten)	units, systems, and processes of
Compare Length	• Sort up to 3	• Count to 100 by ones and	measurement
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	1	1

Correlation to The National Council of Teachers Mathematics and Common Core Standards

Correlation to
How do I use the length of objects to order and sort it?

longest/shortest and shortest/longest

 Number pictures of objects in order from longest/shortest and shortest/longest Count to tell the number of objects.

(Kindergarten)

 Understand the relationship between numbers and quantities; connect counting to cardinality. Understand that each successive number name refers to a quantity that is one larger.

Measurement and Data

Describe and compare measurable attributes. (Kindergarten)

- Describe measurable attributes of objects, such as length or weight.
 Describe several measurable attributes of a single object.
- 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.

- Recognize the attributes of length
- Compare and order objects according to these attributes
- Understand how to measure using nonstandard and standard units

Apply appropriate techniques, tools, and formulas to determine measurements

(Pre-K – Grade 2)

- Use tools to measure **Communication** (Pre-K Grade 5)
- Communicate mathematical thinking coherently and clearly
- Use the language of mathematics to express mathematical ideas precisely

Lesson 35: Twenty Chart

Lesson 36: Twenty Chart Review

How do I use a twenty chart to understand and

- Use a twenty chart to show number patterns
- Complete missing sections of the twenty chart
- Find your place on the twenty chart by going up and down

Counting and Cardinality

Know number names and the count sequence.
(Kindergarten)

- Count to 100 by ones and by tens.
- Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

Number and Operations

Understand numbers, ways of representing numbers, relationships among numbers, and number systems (Pre-K – Grade 2)

 Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers

find manufact		W 1 1 C 0	
find number patterns?		Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). Count to tell the number of objects. (Kindergarten) Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name with one and only one object.	 Connect number words and numerals to the quantities they represent, using various physical models and representations Compute fluently and make reasonable estimates. (Pre-K – Grade 2) Use a variety of methods and tools to compute, including objects, mental computation, paper and pencil Algebra Understand patterns, relations, and functions (Pre-K – Grade 2) Recognize, describe, and extend patterns such as sequences of sounds and shapes or simple numeric patterns and translate from one representation to another Use mathematical models to represent and understand quantitative relationships (Pre-K- Grade 2) Model situations that involve the addition and subtraction of whole numbers, using objects, pictures, and symbols Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and Communicate mathematical Communica
			mathematical ideas precisely
Lesson 37:	• Compare number	Counting and Cardinality	Number and Operations
Greater Than or	of objects using	Compare numbers.	Understand numbers, ways of
Less Than	words greater than or less than	(Kindergarten)	representing numbers,, relationships among numbers,
Lesson 38:		Identify whether the number of objects in one	and number systems
Greater Than or	Compare number symbols using	number of objects in one group is greater than, less	(Pre-K – Grade 2)
Steater Than or	symbols using	group is greater than, less	(110 11 01440 2)

T	T		
Less Than Review How do I compare numbers using greater than or less than?	greater than or less than	than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. • Compare two numbers between 1 and 10 presented as written numerals. Number and Operations in Base Ten Understand place value. (Grade 1) • Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	 Develop an understanding of the relative position and magnitude of whole numbers and of ordinal and cardinal numbers Connect number words and numerals to the quantities they represent, using various physical models and representations Algebra Represent and analyze mathematical situations and structures using algebraic symbols (Pre-K – Grade 2) Use concrete, pictorial, and verbal representations to develop an understanding of invented and conventional symbolic notations Communication (Pre-K – Grade 5) Communicate mathematical thinking coherently and clearly Use the language of mathematics to express mathematical ideas precisely
Lesson 39:	• Use counters to	Counting and Cardinality	Number and Operations
Take Away	solve take away	Know number names and the	Understand numbers, ways of
T 40.	problems	count sequence.	representing numbers,,
Lesson 40:	Have a take away	(Kindergarten)	relationships among numbers, and number systems
Take Away Review	problem and have	• Count to 100 by ones and by tens.	(Pre-K – Grade 2)
Review	students represent it using counters	Count to tell the number of	 Develop an understanding of
How do I use	and pictures	objects.	the relative position and
pictures and	 Recognize the 	(Kindergarten)	magnitude of whole numbers
counters to	subtraction	Understand the	and of ordinal and cardinal
understand	symbol	relationship between	numbers
subtraction?		numbers and quantities;	Connect number words and
		connect counting to	numerals to the quantities
		cardinality. When	they represent, using various
		counting objects, say the	physical models and
		number names in the	representations

Correlation to The National Council of Teachers Mathematics and Common Core Standards

standard order, pairing each object with one and only one number name and each number name with one and only one object.

Operations and Algebraic Thinking

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. (Kindergarten)

 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. Compute fluently and make reasonable estimates.
(Pre-K – Grade 2)

- Use a variety of methods and tools to compute, including objects, mental computation, paper and pencil
- Develop and use strategies for whole-number computations, with a focus on addition and subtraction
- Develop fluency with basic number combinations for addition and subtraction

Understand meanings of operations and how they relate to one another

(Pre-K - Grade 2)

- Understand various meanings of addition and subtraction of whole numbers and the relationship between the two operations
- Understand the effects of adding and subtracting whole numbers

Algebra

Use mathematical models to represent and understand quantitative relationships

 (Pre-K- Grade 2) Model situations that involve the addition and subtraction of whole numbers, using objects, pictures, and symbols

Represent and analyze mathematical situations and structures using algebraic symbols

(Pre-K – Grade 2)

 Use concrete, pictorial, and verbal representations to develop an understanding of addition and subtraction

symbols
Communication (Pre-K – Grade
5)
Communicate mathematical
thinking coherently and
clearly
• Use the language of
mathematics to express
mathematical ideas precisely