

Rose Hamilton Elementary Curriculum Mapping
Math – Kindergarten
1st Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
	MA.K.CA.5	What kinds of patterns can I make with numbers?	Count orally by ones to at least 30.	number names	Anecdotal records
	MA.K.NS.1	How can I count large numbers of objects efficiently?	Count orally by tens to 30.	number names	Same as above
	MA.K.NS.2	What happens when the digits in a number are changed?	Recognize numbers from 0 to 10. 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 names	Daily activities, homework, chp. unit tests
	MA.K.NS.4	How can I count large numbers of objects efficiently?	Count objects by touching them singularly while saying the number name.	number names	Same as above and anecdotal records
	MA.K.NS.4		Recognize that the last number named tells the number of objects counted.	number names	Same as above
	MA.K.NS.3	Why are predictable mathematical patterns important?	Recognize that each successive number name refers to a quantity that is one larger.	number names	Same as above
	MA.K.NS.11	What happens when the digits in a number are changed?	Compose numbers from 11-19 from a group of ten ones and additional ones using objects.	Number names	Same as above
	MA.K.DA.1	What does a picture graph tell me?	Classify objects into given categories such as size, shape, color, thickness.	picture graph	Anecdotal records & daily activities
	MA.K.DA.1	How can I count large numbers of objects efficiently?	Count the number of objects (10 or less) in each category.	number names	Same as above

	MA.K.G.1		Identify and name the following shapes: squares, circles, triangles, rectangles, hexagons.		Same as above
	MA.K.G.2	What makes a shape a shape?	Describe objects in the environment using names of shapes (two-dimensional).		Same as above
	MA.K.G..1	How can I describe the location of one object, given the location of another object?	Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.	near, far, under, over, up, down, behind, in front of, next to, to the left/right of	Same as above
	MA.K.DA.1	What makes a shape a shape?	Name shapes regardless of their orientation or overall size.		Same as above
	MA.K.G.2		Describe two-dimensional shapes to identify their various attributes, including vertices, sides, corners, and length of sides.		Same as above
	MA.K.G.3	How can I use objects, drawings and equations to act out real-life situations?	Make shapes to represent objects in the world. (Use clay, sticks, draw, etc.)		Daily activities

Curriculum Mapping
Math – Kindergarten
 2nd Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
	MA.K.NS.1	What kinds of patterns can I make with numbers?	Count orally by ones to at least 60.	number names	Anecdotal records & daily activities
	MA.K.NS.1	How can I count large numbers of objects efficiently?	Count by tens to 60.	number names	Same as above
	MA.K.NS.1	Why are predictable mathematical patterns important?	Count forward beginning from a given number (not 1) within the known sequence (known sequence includes counting by ones and tens).	number names	Same as above
	MA.K.NS.2	What happens when the digits in a number are changed?	Print numbers from 0-20 when prompted (Number formation).	number names	Anecdotal records, daily activities, homework, chp.unit tests
	MA.K.NS.2		Recognize numbers from 11-20 out of sequence.	number names	Anecdotal records and daily activities
	MA.K.NS.4		Explain orally the number of objects is the same regardless of their arrangement. - 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.	number names	Oral assessments
	MA.K.NS.5		Count up to 20 objects that are in an order by answering the question "how many."	number names	Same as above

	MA.K.NS.5	How can I count large numbers of objects efficiently?	Count up to 10 objects in a scattered configuration by answering the question "how many."	number names	Same as above
	MA.K.NS.5		Given a number from 1-20, count out that many objects.	number names	Same as above
	MA.K.NS.7		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.	greater than less than equal to	Anecdotal records, oral assessments, daily act., unit chp. tests
	MA.K.CA.1	How can I use symbols and numbers to show the actions of taking apart and combining numbers? How can I use objects, drawings and equations to act out real-life situations?	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	number sentence (equation), symbols, +, -, =,	Anecdotal records, oral assessments, daily act., unit chp. tests
	MA.K.CA.1		Explain orally addition as putting together and adding to.	number sentence (equation), symbols, +, -, =,	Oral assessments
	MA.K.CA.1		Explain orally subtraction as taking apart or taking from.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.CA.2	How can I use objects, drawings and equations to act out real-life situations?	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	number sentence (equation), symbols, +, -, =,	Anecdotal records, oral assessments, daily act., unit chp. tests
	MA.K.CA.4	How can I use symbols and numbers to show the actions of taking apart and combining numbers?	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 sentence (equation), symbols, +, -, =, picture graph	Anecdotal records, oral assessments, daily act., unit chp. tests

	MA.K.NS.11	What happens when the digits in a number are changed?	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	number sentence (equation), symbols, +, -, =, picture graph	Anecdotal records, oral assessments, daily act., unit chp. tests
	MA.K.M.1		Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.		Oral assessments & anecdotal records
	MA.K.M.1		Compare the measurable attributes of two objects using appropriate vocabulary including taller/shorter, heavier/lighter, longer/shorter. For example, directly compare the heights of two children and describe one child as taller/shorter.	shorter, longer, taller, lighter, heavier, length,	Oral assessments & anecdotal records

Curriculum Mapping

Math – Kindergarten

3rd Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
	MA.K.NS.1	What kinds of patterns can I make with numbers?	Count orally to 100 by ones.	number names	Oral assessments
	MA.K.NS.1	How can I count large numbers of objects efficiently? What patterns do I notice on a hundreds chart?	Count orally by tens to one hundred.	number names	Same as above
	MA.K.NS.1	Why are predictable mathematical patterns important?	Count forward beginning from a given number (not 1) within the known sequence (known sequence includes counting by ones and tens).	number names	Same as above
	MA.K.NS.2	What kinds of patterns can I make with numbers? What happens when the digits in a number are changed?	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 names	Anecdotal records, oral assessments, daily act., unit chp. tests, homework
	MA.K.NS.7	How can I break a number or shape into smaller parts?	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.	greater than less than equal to	Same as above

	MA.K.NS.7		Compare two written numbers between 1 and 10, and state which is more or less. (5 is more than 2.)	greater than less than	Same as above
	MA.K.CA.1	How can I use symbols and numbers to show the actions of taking apart and combining numbers? What does a picture graph tell me? How can I use objects, drawings and equations to act out real-life situations?	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	number sentence (equation), symbols, +, -, =, picture graph	Same as above
	MA.K.CA.1		Solve addition word problems orally up to 10 when read aloud using objects or drawings.	number sentence (equation), symbols, +, -, =, picture graph	Same as above
	MA.K.CA.3	How can I use objects, drawings and equations to act out real-life situations? How can I break a number or shape into smaller parts?	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	number sentence (equation), symbols, +, -, =, picture graph	Same as above
	MA.K.CA.4		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 sentence (equation), symbols, +, -, =, picture graph	Same as above
	MA.K.CA.4		K.OA.4.c. Represent the number that makes 5 when added to any given number 1-4 with a drawing.		Same as above
	MA.K.CA.4		K.OA.4.d. Represent the number that makes 10 when added to any given number, 1-9, with a drawing.		Same as above

	MA.K.CA.2		Add fluently, orally or in writing, within 5.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.CA.2		Subtract fluently, orally or in writing, within 5.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.NS.11	<p>How can I use symbols and numbers to show the actions of taking apart and combining numbers?</p> <p>How can I use objects, drawings and equations to act out real-life situations?</p> <p>How can I break a number or shape into smaller parts?</p>	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.M.1		Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.		Oral assessments
	MA.K.M.1		Compare the measurable attributes of two objects using appropriate vocabulary including taller/shorter, heavier/lighter, longer/shorter. For example, directly compare the heights of two children and describe one child as taller/shorter.	shorter, longer, taller, lighter, heavier, length,	Same as above
	MA.K.G.1	How can I describe the location of one object, given the location of another object?	Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.	near, far, under, over, up, down, behind, in front of, next to, to the left/right of	Same as above

	MA.K.G.2	What makes a shape a shape?	Identify and name the following shapes: cubes, cones, cylinders, and spheres.		Same as above
	MA.K.G.2	How can I break a number or shape into smaller parts? What does it mean to have part of a whole?	Describe objects in the environment using the names of shapes (two-dimensional and three-dimensional).	two-dimensional	Same as above
	MA.K.DA.1	What makes a shape a shape?	Name shapes regardless of their orientation or overall size.		Same as above
	MA.K.G.2	What does it mean to have part of a whole?	Identify shapes as two-dimensional and flat. Use actual objects, not just pictures.	two-dimensional	Same as above
	MA.K.DA.1	What does a picture graph tell me?	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	picture graph	Daily activities, anecdotal records
	MA.K.G.2	How can I break a number or shape into smaller parts?	Describe three-dimensional shapes to identify their various attributes including faces and edges.	three-dimensional	Oral assessments
	MA.K.G.3	How can I use objects, drawings and equations to act out real-life situations?	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		Daily activities
	MA.K.G.3	What makes a shape a shape? What does it mean to have part of a whole?	Model shapes in the world by building shapes from components. Examples of components: sticks, clay, balls, marshmallows.		Same as above

Curriculum Mapping

Math – Kindergarten

4th Nine Weeks

Unit Chapter Lesson	Indiana Standard(s)	Key Questions	Resources/Activities	Vocabulary	Assessments
	MA.K.NS.1	What kinds of patterns can I make with numbers? What patterns do I notice on a hundreds chart?	Count to 100 by ones and by tens.	number names	Oral assessments
	MA.K.NS.1		Count forward beginning from a given number (not 1) within the known sequence (known sequence includes counting by ones and tens).	number names	Same as above
	MA.K.NS.2	Why are predictable mathematical patterns important? What happens when the digits in a number are changed?	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 names	Anecdotal records, oral assessments, daily act., unit chp. tests, homework
	MA.K.NS.7		K.CC.6.b., 6.d. & 6.f 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.	greater than less than equal to	Same as above
	MA.K.NS.8		K.CC.7. Compare two written numbers between 1 and 10, and state which is more or less. (5 is more than 2.)	greater than less than	Same as above

	MA.K.CA.1	How can I use objects, drawings and equations to act out real-life situations? How are addition and subtraction related?	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.CA.2		Solve addition word problems orally up to 10 when read aloud using objects or drawings.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.NS.11	How can I use symbols and numbers to show the actions of taking apart and combining numbers? How can I use objects, drawings and equations to act out real-life situations?	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	number sentence symbols, +, -, =, (equation),	Same as above
	MA.K.CA.4		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 sentence (equation), symbols, +, -, =,	Same as above
	MA.K.CA.2	How are addition and subtraction related?	Add & subtract fluently, orally or in writing, within 5.	number sentence (equation), symbols, +, -, =,	Same as above
	MA.K.M.1	In what ways can I measure an object?	K.MD.1.b. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object		Oral assessments

	MA.K.M.1	In what ways can I measure an object?	Compare the measurable attributes of two objects using appropriate vocabulary including taller/shorter, heavier/lighter, longer/shorter. For example, directly compare the heights of two children and describe one child as taller/shorter.	shorter, longer, taller, lighter, heavier, length,	Same as above
	MA.K.G.1	How can I describe the location of one object, given the location of another object? How can I give directions from here to there?	Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.	near, far, under, over, up, down, behind, in front of, next to, to the left/right of	Same as above
	MA.K.G.2		Identify and name the following shapes: cubes, cones, cylinders, and spheres.		Same as above
	MA.K.G.2		Describe objects in the environment using the names of shapes (two-dimensional and three-dimensional).	two-dimensional three-dimensional	Same as above
	MA.K.DA.1	What does it mean to have part of a whole?	Name shapes regardless of their orientation or overall size.		Same as above
	MA.K.G.2	How can I break a number or shape into smaller parts?	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	two-dimensional	Same as above

	MA.K.G.2		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).	three-dimensional two-dimensional	Same as above
	MA..G.3	How can I use objects, drawings and equations to act out real-life situations? What does it mean to have part of a whole?	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		Daily activities, anecdotal notes

Indiana Academic Standards

NUMBER SENSE KINDERGARTEN

K.NS.1: Count to at least 100 by ones and tens and count on by one from any number.

K.NS.2: Write whole numbers from 0 to 20 and recognize number words from 0 to 10. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

K.NS.3: Find the number that is one more than or one less than any whole number up to 20.

K.NS.4: Say the number names in standard order when counting objects, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number name said describes the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted.

K.NS.5: Count up to 20 objects arranged in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.

K.NS.6: Recognize sets of 1 to 10 objects in patterned arrangements and tell how many without counting. **K.NS.7:** 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).

K.NS.8: Compare the values of two numbers from 1 to 20 presented as written numerals.

K.NS.9: Use correctly the words for comparison, including: one and many; none, some and all; more and less; most and least; and equal to, more than and less than.

K.NS.10: Separate sets of ten or fewer objects into equal groups.

K.NS.11: Develop initial understandings of place value and the base 10 number system by showing equivalent forms of whole numbers from 10 to 20 as groups of tens and ones using objects and drawings.

COMPUTATION AND ALGEBRAIC THINKING KINDERGARTEN

K.CA.1: Use objects, drawings, mental images, sounds, etc., to represent addition and subtraction within 10.

K.CA.2: Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem).

K.CA.3: Use objects, drawings, etc., to decompose numbers less than or equal to 10 into pairs in more than one way, and record each decomposition with a drawing or an equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$). [In Kindergarten, students should see equations and be encouraged to trace them, however, writing equations is not required.]

K.CA.4: Find the number that makes 10 when added to the given number for any number from 1 to 9 (e.g., by using objects or drawings), and record the answer with a drawing or an equation.

K.CA.5: Create, extend, and give an appropriate rule for simple repeating and growing patterns with numbers and shapes.

GEOMETRY KINDERGARTEN

K.G.1: Describe the positions of objects and geometric shapes in space using the terms inside, outside, between, above, below, near, far, under, over, up, down, behind, in front of, next to, to the left of and to the right of.

K.G.2: 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.3: Model shapes in the world by composing shapes from objects (e.g., sticks and clay balls) and drawing shapes. **K.G.4:** Compose simple geometric shapes to form larger shapes (e.g., create a rectangle composed of two triangles).

MEASUREMENT KINDERGARTEN

K.M.1: Make direct comparisons of the length, capacity, weight, and temperature of objects, and recognize which object is shorter, longer, taller, lighter, heavier, warmer, cooler, or holds more.

K.M.2: Understand concepts of time, including: morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year. Understand that clocks and calendars are tools that measure time.

DATA ANALYSIS KINDERGARTEN

K.DA.1: Identify, sort, and classify objects by size, number, and other attributes. Identify objects that do not belong to a particular group and explain the reasoning used