KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	Q1	Q2	Q3	Q4
Quarter 1				
K.CC.1.a. Count orally by ones to at least 30. (Goal of 100)				
K.CC.1.b. Count orally by tens to 30. (Goal of 100)				
K.CC.3.a. Recognize numbers from 0 to 10.				
K.CC.3.b. Print numbers from 0-9 when prompted. (Number formation)				
K.CC.4.a. Count objects by touching them singularly while saying the number name.				
K.CC.4.b-1. Recognize that the last number named tells the number of objects counted.				
K.CC.4.c. Recognize that each successive number name refers to a quantity that is one larger.				
K.G.1.a. Identify and name the following shapes: squares, circles, triangles, rectangles, hexagons.				
K.G.1.b. Describe objects in the environment using names of shapes (two-dimensional).				
K.G.1.c. Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.				
K.G.2. Name shapes regardless of their orientation or overall size.				
K.G.4.a. Describe two-dimensional shapes to identify their various attributes, including vertices, sides, corners, and length of sides.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.G.5.a. Draw shapes to represent objects in the world.				
K.NBT.1.a. Compose numbers from 11-19 from a group of ten ones and additional ones using objects.				
K.MD.3.a. Classify objects into given categories such as size, shape, color, thickness.				
K.MD.3.b. Count the number of objects (10 or less) in each category.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 2				
K.CC.1.c. Count orally by ones to at least 60. (Goal of 100)				
K.CC.1.d. Count by tens to 60. (Goal of 100)				
K.CC.2. Count forward beginning from a given number (not 1) within the known sequence (known sequence includes counting by ones and tens).				
K.CC.3.c. Print numbers from 0-20 when prompted (Number formation).				
K.CC.3.d. Recognize numbers from 11-20 out of sequence.				
K.CC.4.b-2. Explain orally the number of objects is the same regardless of their arrangement.				
K.CC.5.a. Count up to 20 objects that are in an order by answering the question "how many."				
K.CC.5.b. Count up to 10 objects in a scattered configuration by answering the question "how many."				
K.CC.5.c. Given a number from 1-20, count out that many objects.				
K.CC.6.a. Explain the meaning of "greater than."				
K.CC.6.b. Compare two groups of objects and identify and state which group is greater.				
K.CC.6.c. Explain the meaning of "equal to."				
K.CC.6.d. Compare two groups of objects and identify and state if they are equal.				
K.CC.6.e. Explain the meaning of "less than."				
K.CC.6.f. Compare two groups of objects and identify and state which group has less.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.OA.1.a. Represent addition with objects, fingers, and sounds to identify the meaning of addition as putting together and adding to.		✅		
K.OA.1.b. Represent subtraction with objects, fingers, and sounds to identify the meaning of subtraction as taking apart and taking from.		✅		
K.OA.1.c. Explain orally addition as putting together and adding to.		✅		
K.OA.1.d. Explain orally subtraction as taking apart or taking from.		✅		
K.OA.2.a. Solve addition word problems orally up to 10 when read aloud using objects or drawings.			✅	
K.OA.2.b. Solve subtraction word problems orally up to 10 when read aloud using objects or drawings.			✅	
K.OA.4.a. State the number that makes 5 when added to any given number 1-4 with objects.		✅		
K.G.1.c. Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.				✅
K.G.4.a. Describe two-dimensional shapes to identify their various attributes, including vertices, sides, corners, and length of sides.		✅		
K.G.5.a. Draw shapes to represent objects in the world.				✅
K.NBT.1.a. Compose numbers from 11-19 from a group of ten ones and additional ones using objects.		✅		
K.NBT.1.b. Decompose numbers from 11-19 into a group of 10 ones and additional ones using objects.		✅		

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.NBT.1.c. Record the compostion of numbers 11-19 through drawings of a group of ten ones and additional ones.				
K.MD.1.a. Distinguish between measurable and non-measurable attributes of objects. (Measurable means quantifiable, such as length, weight, height, distance around).				
K.MD.1.b. Name the measurable attributes of a given object.				
K.MD.2. 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.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 3				
K.CC.1.e. Count orally to 100 by ones.				
K.CC.1.f. Count orally by tens to one hundred.				
K.CC.2. Count forward beginning from a given number (not 1) within the known sequence (known sequence includes counting by ones and tens).				
K.CC.3.e. Write the number that represents how many objects are in a set, up to 20.				
K.CC.6.b. Compare two groups of objects and identify and state which group is greater.				
K.CC.6.d. Compare two groups of objects and identify and state if they are equal.				
K.CC.6.f. Compare two groups of objects and identify and state which group has less.				
K.CC.7. Compare two written numbers between 1 and 10, and state which is more or less. (5 is more than 2.)				
K.OA.1.e. Represent addition and subtraction by acting out situations and drawings.				
K.OA.2.a. Solve addition word problems orally up to 10 when read aloud using objects or drawings.				
K.OA.2.b. Solve subtraction word problems orally up to 10 when read aloud using objects or drawings.				
K.OA.3.a. Orally decompose (break apart) numbers less than or equal to 5 into parts in more than one way. (Goal of up to 10).				
K.OA.3.b. Represent the result of decomposition of numbers less than or equal to 5 through drawing or an equation.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.OA.4.b. State the number that makes 10 when added to any given number 1-9 with objects.				☐
K.OA.4.c. Represent the number that makes 5 when added to any given number 1-4 with a drawing.			☐	
K.OA.4.d. Represent the number that makes 10 when added to any given number, 1-9, with a drawing.			☐	
K.OA.5.a. Add fluently, orally or in writing, within 5.				☐
K.OA.5.b. Subtract fluently, orally or in writing, within 5.				☐
K.NBT.1.c. Record the compostion of numbers 11-19 through drawings of a group of ten ones and additional ones.			☐	
K.NBT.1.d. Record the decomposition of numbers 11-19 through a drawing of a group of ten ones and additional ones.			☐	
K.MD.1.b. Name the measurable attributes of a given object.				☐
K.MD.2. 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.				☐
K.G.1.c. Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.				☐
K.G.1.d. Identify and name the following shapes: cubes, cones, cylinders, and spheres.			☐	
K.G.1.e. Describe objects in the environment using the names of shapes (two-dimensional and three-dimensional).			☐	
K.G.2. Name shapes regardless of their orientation or overall size.			☐	

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.G.3.a. Identify shapes as two-dimensional and flat.				
K.G.3.b. Identify shapes as three-dimensional and solid. (Use objects, not pictures).				
K.G.3.c. Sort objects into flat or solid categories.				
K.MD.3.c. Sort categories by count.				
K.G.4.b. Describe three-dimensional shapes to identify their various attributes including faces and edges.				
K.G.5.a. Draw shapes to represent objects in the world.				
K.G.5.b. Model shapes in the world by building shapes from components. Examples of components: sticks, clay, balls, marshmallows.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	Q1	Q2	Q3	Q4
Quarter 4				
K.CC.3.e. Write the number that represents how many objects are in a set, up to 20.				
K.CC.7. Compare two written numbers between 1 and 10, and state which is more or less. (5 is more than 2.)				
K.OA.1.f. Represent addition and subtraction with verbal explanations and mental images.				
K.OA.1.g. Represent addition and subtraction with expressions and equations.				
K.OA.3.c. Decompose (break apart) numbers less than or equal to 10 into pairs in more than one way.				
K.OA.3.d. Represent the result of decomposition of numbers less than or equal to 10 through drawing or equation.				
K.OA.4.b. State the number that makes 10 when added to any given number 1-9 with objects.				
K.OA.4.e. Represent the number that makes 5 when added to any given number 1-4 with an equation.				Mastery not Required
K.OA.4.f. Represent the number that makes 10 when added to any given number 1-9 with an equation.				Mastery not Required
K.OA.5.a. Add fluently, orally or in writing, within 5.				
K.OA.5.b. Subtract fluently, orally or in writing, within 5.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	**Q1**	**Q2**	**Q3**	**Q4**
K.NBT.1.e. Record the composition of numbers 11-19 through an equation of a group of ten ones and additional ones.				
K.NBT.1.f. Record the decomposition of numbers 11-19 through an equation of a group of ten ones and additional ones.				
K.MD.1.b. Name the measurable attributes of a given object.				
K.MD.2. 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.				
K.G.1.c. Describe the relative position of objects using appropriate vocabulary, including above, below, beside, in front of, behind, next to.				
K.G.4.b. Describe three-dimensional shapes to identify their various attributes including faces and edges.				
K.G.4.c. State the differences of two- and three-dimensional shapes in different sizes and orientations.				
K.G.4.d. State the similarities and two- and three-dimensional shapes in different sizes and orientations.				
K.G.5.a. Draw shapes to represent objects in the world.				
K.G.6. Create a new shape from at least two other shapes using tangible materials. Simple shapes include squares, circles, triangles, rectangles, hexagons.				

KINDERGARTEN MATHEMATICS				
Highlighted quarters represent mastery expected				
CCSS	Q1	Q2	Q3	Q4
Mathematical Practices (on-going*)				
Students should use these strategies nearly every day. These learning targets can only be assessed in conjunction with other learning targets, and should not be viewed as stand-alone targets.				
MP.1. Make sense of problems and persevere in solving them.				
MP.2. Reason abstractly and quantitatively.				
MP.3. Construct viable arguments and critique the reasoning of others.				
MP.4. Model with mathematics.				
MP.5. Use appropriate tools strategically.				
MP.6. Attend to precision.				
MP.7. Look for and make use of structure.				
MP.8. Look for and express regularity in repeated reasoning.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 1	**Quarter 1**				
Number and operations in base 10	**Number and operations in base 10**				
Extend the counting sequence. 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. (NBT)	1.1.1a Orally count whole numbers up to 100. 1.1.1b Write whole numbers up to 100 in numerical form. 1.1.1c Read whole numbers up to 100 that are written numerically. 1.1.1d Write whole numbers up to 10 in word form.	1.1.1a-b			
	1.1.4a Investigate and explain that each successive (preceding) number name refers to a quantity that is one larger (smaller).				
	1.1.5a Arrange any given set of whole numbers up to ten in numerical order from least to greatest and from greatest to least. 1.1.5b Identify whether two whole numbers up to ten are greater than, less than, or equal to each other.				
	1.1.6a Explain the relationship between the order of objects, numbers, and ordinal names (first, second, third, etc.). 1.1.6b Identify an object's ordinal position in an ordered set of up to 10 items when given oral directions.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
	1.2.1a Explain the meaning of addition (putting together, increasing) using objects or words. 1.2.1b Model addition with up to 20 objects.	1.2.1b			
6.Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (OA)	1.2.2a Explain the meaning of subtraction (taking away, comparing, and finding the difference) using objects or words. 1.2.2b Model subtraction with up to 20 objects.				
	1.2.3a Decompose the same whole number (up to 20) into parts, using objects, diagrams, and numbers. 1.2.3b Generate equivalent forms (using addition and subtraction) of the same whole number (up to 20) using objects, diagrams, and numbers.				
	1.2.4a Add (mentally and with paper and pencil) up to 20, demonstrating mastery. 1.2.4b Subtract (mentally and with paper and pencil) up to 20, demonstrating mastery.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	1.2.5a Explain the meaning of the equal sign to represent equivalence. 1.2.5b Explain the meaning of the symbols + and -. 1.2.5c Define number sentence (equation). 1.2.5d Apply the symbols + and - appropriately.				
	1.2.6a Explain the role of zero in addition. 1.2.6b Show the role of zero in addition, using objects, diagrams, and number sentences (equations). 1.2.6c Show the role of zero in subtraction, using objects, diagrams, and number sentences (equations). 1.2.6d Explain the role of zero in subtraction.				
	1.3.1a Write addition number sentences (equations) up to 20 from problem situations. 1.3.1b Solve addition number sentences (equations) up to 20 from problem situations. 1.3.1c Write subtraction number sentences (equations) up to 20 from problem situations. 1.3.1d Solve subtraction number sentences (equations) up to 20 from problem situations.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (OA) 5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). (OA)	1.3.2a Create (orally and/or in writing) word problems that match given number sentences (equations) involving addition. 1.3.2b Create (orally and/or in writing) word problems that match given number sentences (equations) involving subtraction.				
Geometry	**Geometry**				
Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. (G)	1.4.1b Identify, describe, compare, sort, and draw triangles. 1.4.1c Identify, describe, compare, sort, and draw rectangles. 1.4.1d Identify, describe, compare, sort, and draw squares. 1.4.1e Identify, describe, compare, sort, and draw circles.				
	1.4.6a Describe the relative position of objects in the environment using terms such as near, far, under, over, up, down, behind, in front of, next to, to the left or right of. 1.4.6b Place objects in the environment as orally directed by the following relative positions: near, far, under, over, up, down, behind, in front of, next to, to the left or right of.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (G)	1.4.7b Tell where the two-dimensional and three-dimensional geometric shapes are found in the environment.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Mathematical Practices	**Mathematical Practices**				
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	1.6.1a Choose the approach, materials, and strategies to use in solving problems.				
	1.6.2a Use tools such as objects or drawings to model problems.				
	1.6.3a Explain the reasoning used and justify the procedures selected in solving a problem.				
	1.6.4a Make precise calculations and check the validity of the results in the context of the problem.				
	1.6.5a Understand and use connections between two problems.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 2	**Quarter 2**				
Number and Operations in Base Ten	**Number and Operations in Base Ten**				
Extend the counting sequence. 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. (NBT)	1.1.1c Read whole numbers up to 100 that are written numerically. 1.1.1d Write whole numbers up to 10 in word form.				
Understand place value. 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." (NBT)	1.1.2a Recognize that ten can be thought of as a bundle of ten ones.				
5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. (NBT)	1.1.4a Investigate and explain that each successive (preceding) number name refers to a quantity that is one larger (smaller). 1.1.4b From any given whole number up to 100, find the number that is one more or one less.		1.1.4a		
	1.1.6c Identify an object's ordinal position in an ordered set of up to 10 items when given written directions.				
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
	1.2.1a Explain the meaning of addition (putting together, increasing) using objects or words.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (OA)	1.2.2a Explain the meaning of subtraction (taking away, comparing, and finding the difference) using objects or words. 1.2.2b Model subtraction with up to 20 objects.				
	1.2.3a Decompose the same whole number (up to 20) into parts, using objects, diagrams, and numbers. 1.2.3b Generate equivalent forms (using addition and subtraction) of the same whole number (up to 20) using objects, diagrams, and numbers.				
	1.2.4a Add (mentally and with paper and pencil) up to 20, demonstrating mastery.				
Work with addition and subtraction equations. 7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 – 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2. (OA)	1.2.5a Explain the meaning of the equal sign to represent equivalence. 1.2.5b Explain the meaning of the symbols + and - . 1.2.5c Define number sentence (equation).		1.2.5b-c		
4. Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. (OA)	1.2.7b Show the inverse relationship between addition and subtraction (up to 20), using objects, diagrams, and number sentences (equations).				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	1.3.1a Write addition number sentences (equations) up to 20 from problem situations. 1.3.1b Solve addition number sentences (equations) up to 20 from problem situations.				
	1.3.2a Create (orally and/or in writing) word problems that match given number sentences (equations) involving addition.				
	1.3.4a Create complex repeating patterns using numbers and shapes. 1.3.4b Define growing patterns using addition. 1.3.4c Create a growing pattern using addition. 1.3.4d Extend a growing pattern using addition.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measurement and Data	**Measurement and Data**				
Represent and interpret data. 4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (MD)	1.1.10a Organize objects or other data into (up to five) categories. 1.1.10b Define data. 1.1.10c Define a picture graph. 1.1.10d Represent quantities in different categories using pictures and picture graphs. 1.1.10e Answer questions about the total number of data points, how many in each category, and how many more or less are in one category than another. 1.1.10f Ask questions about the total number of data points, how many in each category, and how many more or less are in one category than another.				
Geometry	**Geometry**				
2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (G)	1.4.1a Construct two-dimensional shapes, including triangles, rectangles, squares, and circles.				
	1.4.2a Define faces. 1.4.2b Decompose three-dimensional shapes and identify all two-dimensional faces such as triangles, rectangles, squares, and circles.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Reason with shapes and their attributes. 1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. (G)	1.4.3a Explain the rule used to sort two-dimensional and three-dimensional shapes. 1.4.3b Sort by defining attributes (i.e., triangles are closed and 3 sided) and/or non-defining attributes (i.e., color, orientation, overall size).				
	1.4.4a Identify objects as two-dimensional or three-dimensional.				
	1.4.7a Identify two-dimensional and three-dimensional geometric shapes in the environment.				
Mathematical Practices	**Mathematical Practices**				
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	1.6.1a Choose the approach, materials, and strategies to use in solving problems.				
	1.6.2a Use tools such as objects or drawings to model problems.				
	1.6.3a Explain the reasoning used and justify the procedures selected in solving a problem.				
	1.6.4a Make precise calculations and check the validity of the results in the context of the problem.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	1.6.5a Understand and use connections between two problems.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 3	**Quarter 3**				
Number and Operations in Base Ten	**Number and Operations in Base Ten**				
Understand place value. 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). (NBT)	1.1.2a Recognize that ten can be thought of as a bundle of ten ones. 1.1.2b Identify different methods to count a group of less than one hundred objects. 1.1.2c Explain which method of counting a group of less than one hundred objects is most efficient and why. 1.1.2d Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 refer to 1, 2, 3, 4, 5, 6, 7, 8, and 9 tens (and zero ones). 1.1.2e Demonstrate that the numbers 11-19 are composed of a ten and 1, 2, 3, 4, 5, 6, 7, 8, or 9 ones. 1.1.2f Demonstrate that the numbers 21-99 are composed of 2, 3, 4, 5, 6, 7, 8, or 9 tens and 1, 2, 3, 4, 5, 6, 7, 8, or 9 ones. 1.1.2g Count and group objects in ones and tens.			1.1.2a-d,g	
	1.1.3a Represent the number of tens and ones in numbers less than 100 using objects, pictures, and symbols. 1.1.3b Count and record (using pictures, words, and numbers) the number of tens and ones in two digit numbers. 1.1.3c Explain the relationship between the position of a digit in a two digit number and its value.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. (NBT)	1.1.4b From any given whole number up to 100, find the number that is one more or one less.				
	1.1.6c Identify an object's ordinal position in an ordered set of up to 10 items when given written directions.				
3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. (NBT)					
6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (NBT)					
Operations and Algebraic Training	**Operations and Algebraic Training**				
	1.2.2a Explain the meaning of subtraction (taking away, comparing, and finding the difference) using objects or words. 1.2.2b Model subtraction with up to 20 objects.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
	1.2.3a Decompose the same whole number (up to 20) into parts, using objects, diagrams, and numbers. 1.2.3b Generate equivalent forms (using addition and subtraction) of the same whole number (up to 20) using objects, diagrams, and numbers.				
	1.2.5a Explain the meaning of the equal sign to represent equivalence.				
6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 − 4 = 13 − 3 − 1 = 10 − 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 − 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). (OA)	1.2.7a Explain the inverse relationship between addition and subtraction facts (up to 20). 1.2.7b Show the inverse relationship between addition and subtraction (up to 20), using objects, diagrams, and number sentences (equations).				
	1.3.1a Write addition number sentences (equations) up to 20 from problem situations. 1.3.1b Solve addition number sentences (equations) up to 20 from problem situations.				
	1.3.2a Create (orally and/or in writing) word problems that match given number sentences (equations) involving addition.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (OA)	1.3.3a Solve multiple step word problems that involve both addition and subtraction in the same problem.				
	1.3.4a Create complex repeating patterns using numbers and shapes. 1.3.4b Define growing patterns using addition. 1.3.4c Create a growing pattern using addition. 1.3.4d Extend a growing pattern using addition.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measurement and Data	**Measurement and Data**				
Tell and write time. 3. Tell and write time in hours and half-hours using analog and digital clocks. (MD)	1.5.6a Relate time to events, using terms before/after and shorter/longer. 1.5.6b Explain that on an analog clock, the long hand corresponds to the minutes and the short hand corresponds to the hour. 1.5.6c Write and tell time to the hour when the minute hand is on the 12. 1.5.6d Identify that when the minute hand is at the 6 (30 minutes), the elapsed time represents half of an hour or half of the face of the analog clock. 1.5.6e Manipulate the minute hand, starting at 12 and ending at 6, to count by ones to show an elapsed time of 30 minutes on an analog clock. 1.5.6f Tell and write the time to the nearest half hour on an analog clock.				
	1.5.7a Identify pennies, nickels, and dimes. 1.5.7b State the value (in cents) of a penny, nickel, and dime. 1.5.7c Calculate the value of a collection of pennies, nickels, and/or dimes.				
Geometry	**Geometry**				
	1.1.7a Define congruent. 1.1.7b Show different ways to divide a shape (rectangles and circles) into congruent parts. 1.1.7c Explain how, when all congruent parts are included, the result is the whole shape (rectangles and circles).				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. (G)	1.1.8a Describe a divided shape (rectangles and circles) in terms of its congruent parts, using the words halves, fourths, and quarters. 1.1.8b Orally state "__ out of __ parts" to describe the part of the whole shape (rectangles and circles) that is shaded. 1.1.8c Represent "__ out of __ parts" (up to 8). 1.1.8d Write the fraction that describes the part of the whole shape (rectangles and circles) that is shaded.				
	1.1.9a Describe the whole set in terms of its subsets. 1.1.9b Orally state "__ out of __ parts" to describe a subset and write the fraction. 1.1.9c Represent "__ out of __ parts" (up to 8).				
	1.4.2b Decompose three-dimensional shapes and identify all two-dimensional faces such as triangles, rectangles, squares, and circles.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Mathematical Practices	**Mathematical Practices**				
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	1.6.1a Choose the approach, materials, and strategies to use in solving problems.				
	1.6.2a Use tools such as objects or drawings to model problems.				
	1.6.3a Explain the reasoning used and justify the procedures selected in solving a problem.				
	1.6.4a Make precise calculations and check the validity of the results in the context of the problem.				
	1.6.5a Understand and use connections between two problems.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 4	**Quarter 4**				
Number and Operations in Base Ten	**Number and Operations in Base Ten**				
Understand place value. 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). (NBT)	1.1.2d Demonstrate that the numbers 10, 20, 30, 40, 50 60, 70, 80, and 90 refer to 1, 2, 3, 4, 5, 6, 7, 8, and 9 tens (and zero ones). 1.1.2e Demonstrate that the numbers 11-19 are composed of a ten and 1, 2, 3, 4, 5, 6, 7, 8, or 9 ones. 1.1.2f Demonstrate that the numbers 21-99 are composed of 2, 3, 4, 5, 6, 7, 8, or 9 tens and 1, 2, 3, 4, 5, 6, 7, 8, or 9 ones.				1.1.2e-f
	1.1.3a Represent the number of tens and ones in numbers less than 100 using objects, pictures, and symbols. 1.1.3b Count and record (using pictures, words, and numbers) the number of tens and ones in two digit numbers. 1.1.3c Explain the relationship between the position of a digit in a two digit number and its value.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Use place value understanding and properties of operations to add and subtract. 4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. (NBT)					
Operations and Algebraic Training	**Operations and Algebraic Training**				
2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem (OA)	1.2.2a Explain the meaning of subtraction (taking away, comparing, and finding the difference) using objects or words. 1.2.2b Model subtraction with up to 20 objects.				
Understand and apply properties of operations and the relationship between addition and subtraction. 3. Apply properties of operations as strategies to add and subtract.3 Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) (OA)	1.2.3a Decompose the same whole number (up to 20) into parts, using objects, diagrams, and numbers. 1.2.3b Generate equivalent forms (using addition and subtraction) of the same whole number (up to 20) using objects, diagrams, and numbers.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	1.2.4a Add (mentally and with paper and pencil) up to 20, demonstrating mastery.				
6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 − 4 = 13 − 3 − 1 = 10 − 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 − 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). (OA)	1.2.7a Explain the inverse relationship between addition and subtraction facts (up to 20). 1.2.7b Show the inverse relationship between addition and subtraction (up to 20), using objects, diagrams, and number sentences (equations).				
	1.3.1a Write addition number sentences (equations) up to 20 from problem situations. 1.3.1b Solve addition number sentences (equations) up to 20 from problem situations.				
	1.3.2a Create (orally and/or in writing) word problems that match given number sentences (equations) involving addition.				
2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. (OA)	1.3.3a Solve multiple step word problems that involve both addition and subtraction in the same problem.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 +? = 11, 5 = ▢ − 3, 6 + 6 = ▢.					
Measurement and Data	**Measurement and Data**				
2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. (MD)	1.5.1a Define standard unit of measure. 1.5.1b Lay out multiple copies of nonstandard and standard (inches and centimeters) units end to end with no gaps or overlaps. 1.5.1c Count multiple copies of nonstandard and standard (inches and centimeters) units that span an object end to end with no gaps or overlaps. 1.5.1d State the length of an object, understanding that it is equal to the number of same sized length units that span it with no gaps or overlaps.				
	1.5.2a Predict the effect of using different unit lengths (nonstandard and standard) when measuring the length of the same object and explain why the prediction is true.				
	1.5.3a State the pros and cons of having different measurements when using different units (nonstandard and standard) to measure the length of the same object. 1.5.3b Explain the need for a fixed unit of length.				

FIRST GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	1.5.4a Define inch. 1.5.4b Define centimeter. 1.5.4c Estimate the length of an object to the nearest inch and centimeter. 1.5.4d Measure the length of an object to the nearest inch and centimeter.				
Measure lengths indirectly and by iterating length units. 1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.	1.5.5a Define area. 1.5.5b Sort objects according to area, capacity, weight, and temperature. 1.5.5c Order objects according to area, capacity, weight, and temperature from least to greatest (greatest to least).				
Geometry	**Geometry**				
2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. (**MD)	1.4.5a Define distance in nonstandard and/or standard (inches and centimeters) units. 1.4.5b Define turns (right or left). 1.4.5c Follow oral or written directions, involving distance and/or turns, for finding a place or object. 1.4.5d Give oral or written directions, involving distance and/or turns, for finding a place or object.				

	FIRST GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Mathematical Practices	**Mathematical Practices**				
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	1.6.1a Choose the approach, materials, and strategies to use in solving problems.				
	1.6.2a Use tools such as objects or drawings to model problems.				
	1.6.3a Explain the reasoning used and justify the procedures selected in solving a problem.				
	1.6.4a Make precise calculations and check the validity of the results in the context of the problem.				
	1.6.5a Understand and use connections between two problems.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 1	**Quarter 1**				
Number and operations in base 10	**Number and operations in base 10**				
Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. Count within 1000; skip-count by 5s, 10s, and 100s. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form	2.1.1a Count orally forward or backward for 10 consecutive numbers from any given number up to 100. 2.1.1b Count orally and write numbers by 2's to 100. 2.1.1c Count orally and write numbers by 5's to 100. 2.1.1d Count orally and write numbers by 10's to 100.				
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 100 can be thought of as a bundle of ten tens — called a "hundred." The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	2.1.2a Describe the pattern of digits in the ones place for each group of ten, from tens through nineties. 2.1.2b Explain that the tens digit does not change in any grouping of ten (i.e., teens, twenties, thirties, forties, etc.) 2.1.2c Describe the patterns in the tens and ones places as you increase or decrease a given number by ten, for any number up to 100.				
Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	2.1.5a Tell if a number is larger or smaller than a given number, with any two numbers up to 100. 2.1.5b Arrange a given set of numbers up to 100 in order from least to greatest. 2.1.5c Arrange a given set of numbers up to 100 in order from greatest to least.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	2.2.1a Model addition of numbers less than 100 with objects. 2.2.1b Model addition of numbers less than 100 by drawing pictures.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	2.3.4a Describe the rule for a given addition number pattern. 2.3.4b Extend number patterns using addition. 2.3.4c Create number patterns using addition.				
Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations.	2.2.2a Add two whole numbers less than 100 without regrouping.				
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	2.2.6a Use mental arithmetic to add 0, 1, 2, 3, 4, 5, or 10 to numbers less than 100.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measurement and Data	**Measurement and Data**				
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	2.5.12a Tell the value in pennies equal to a quarter, half-dollar, and dollar.				
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	2.5.9c Explain the difference between a.m. and p.m.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 2	**Quarter 2**				
Number and operations in base 10	**Number and operations in base 10**				
	2.1.6a Match the number names (first, second, third, etc.) with an ordered set of up to 100 items.				
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equaladdends.	2.1.7a Create models or drawings to represent odd and even numbers. 2.1.7b Explain the difference between odd and even numbers.				
Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	2.1.9a Name the unit fractions: 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, and 1/12.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add up to four two-digit numbers using strategies based on place value and properties of operations.	2.2.2a Add two whole numbers less than 100 without regrouping. 2.2.2b Add two whole numbers less than 100 with regrouping.				
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	2.2.6b Use mental arithmetic to subtract 0, 1, 2, 3, 4, 5, or 10 from numbers less than 100.				
Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	2.3.2d Define the associative property for addition. 2.3.2e Explain how to use the associative property for addition to simplify mental calculations and to check results. 2.3.2f Apply the associative property for addition to simplify mental calculations and to check results.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write anequation to express the total as a sum of equal addends.	2.3.4d Describe the rule for a given subtraction number pattern. 2.3.4e Extend number patterns using subtraction. 2.3.4f Create number patterns using subtraction.				
	Measurement and Data				
	2.5.10b Tell how many minutes are in an hour. 2.5.10d Tell how many days are in a week. 2.5.10h Tell how many months are in a year.				
Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	2.5.2a Tell how many inches are in a foot. 2.5.2b Tell how many feet are in a yard. 2.5.2c Tell how many inches are in a yard. 2.5.2d Describe the relationship between centimeter and meter. 2.5.2e Describe the relationships among inch, foot, and yard.				
Geometry	**Geometry**				
Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	2.1.10a Illustrate that, when all fractional parts are included, the result is equal to the whole and to one. 2.1.10b -- Explain that, when all fractional parts are included, the result is equal to the whole and to one.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	2.4.2a Describe plane shapes (triangle, square, rectangle) by size and number of sides and by number of vertices. 2.4.2b Classify plane shapes (triangle, square, rectangle) by size and number of sides and by number of vertices. 2.4.2c Sort plane shapes (triangle, square, rectangle) by size and number of sides and by number of vertices. 2.4.2d Describe solid geometric shapes (cube, rectangular prism) according to the number and shape of faces and the number of edges and vertices. 2.4.2e Classify solid geometric shapes (cube, rectangular prism) according to the number and shape of faces and the number of edges and vertices.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 3	**Quarter 3**				
Number and operations in base 10	**Number and operations in base 10**				
Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	2.1.11a Collect numerical data in systematic ways using student or teacher generated questions. 2.1.11b Record numerical data in systematic ways.				
Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple puttogether, take-apart, and compare problems using information presented in a bar graph.	2.1.12a Create tables, tally charts, and bar graphs using data. 2.1.12b Compare data found in tables, tally charts, and bar graphs. 2.1.12c Interpret data using tables, tally charts, and bar graphs.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 100 can be thought of as a bundle of ten tens — called a "hundred." The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	2.1.3a Show numbers up to 100 in various combinations of tens and ones using place value drawings. 2.1.3b Show numbers up to 100 in various combinations of tens and ones using place value models. 2.1.3c Write numbers up to 100 in various combinations of tens and ones.				
	2.1.9a Name the unit fractions: 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, and 1/12. 2.1.9b Tell which unit fraction is larger or smaller, given any two unit fractions.				
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds	2.2.3a Subtract two whole numbers less than 100 without regrouping.				
Add up to four two-digit numbers using strategies based on place value and properties of operations.	2.2.4a Show the inverse relationship between addition and subtraction. 2.2.4b Describe the inverse relationship between addition and subtraction. 2.2.4c Apply understanding of inverse relationships to determine if an addition or subtraction answer is valid.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	2.3.1a Select whether an addition or subtraction number sentence fits a given problem situation. 2.3.1b Write an addition number sentence for a given problem situation. 2.3.1c Write a subtraction number sentence for a given problem situation.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measurement and Data	**Measurement and Data**				
	2.5.11a Determine elapsed time in hours.				
Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	2.5.12b Determine the value of a collections of pennies, nickels, dimes, quarters, half-dollars, and dollars.				
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	2.5.1a Measure length to the nearest inch, foot, and yard. 2.5.1b Estimate length to the nearest inch, foot, and yard. 2.5.1c Measure length to the nearest centimeter and meter. 2.5.1d Estimate length to the nearest centimeter and meter.				
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	2.5.2d Tell how many centimeters are in a meter.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	2.5.3a Select whether inches, feet, or yards is the most appropriate unit to measure within a given situation. 2.5.3b Select whether centimeters or meters is the most appropriate unit to measure within a given situation.				
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	2.5.9a Tell the time to the nearest quarter hour using an analog clock. 2.5.9b Determine five-minute intervals using an analog clock.				
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.					

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Geometry	**Geometry**				
	2.4.3a Predict the result of putting together and taking apart two-dimensional shapes. 2.4.3b Create a new shape by putting together and taking apart two-dimensional shapes. 2.4.3c Predict the result of putting together and taking apart three-dimensional shapes. 2.4.3d Create a new shape by putting together and taking apart three-dimensional shapes.				
	2.4.4a Identify (name) congruent two-dimensional shapes in any position.				
	2.4.5a Label/name geometric shapes and structures found in the environment. 2.4.5b Tell where geometric shapes and structures are found in the environment.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 4	**Quarter 4**				
Number and operations in base 10	**Number and operations in base 10**				
Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	2.1.4a Name the number that is ten more or ten less than any number 10 through 90.				
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equaladdends.	2.1.7c Select odd and even numbers from a list of numbers up to 100.				
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
	2.2.5a Explain what estimation means. 2.2.5b Decide whether answers for addition problems are reasonable by using estimation.				
	2.3.3a Describe the rule for a given linear pattern. 2.3.3b Apply the rule to extend a linear pattern				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Measurement and Data	**Measurement and Data**				
	2.5.10a Tell how many seconds are in a minute. 2.5.10c Tell how many hours are in a day. 2.5.10e Tell how many days are in each month. 2.5.10f Tell how many days are in a year. 2.5.10g Tell how many weeks are in a year.				
Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	2.5.4a Estimate how many square tiles would cover a given area. 2.5.4b Determine how many square tiles would cover a given area. 2.5.4c Use a given object to determine the area of another object.				
	2.5.5a Tell how many cups are in a pint. 2.5.5b Measure the capacity of a container using cups. 2.5.5c Estimate capacity of a container using cups. 2.5.5d Measure the capacity of a container using pints. 2.5.5e Estimate capacity of a container using pints.				
	2.5.6a Estimate which of two objects is heavier. 2.5.6b Determine the weight of a given object by using another object.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	2.5.7a Explain why there needs to be a fixed unit of weight when measuring objects.				
	2.5.8a Use a thermometer to measure the temperature in degrees Fahrenheit. 2.5.8b Estimate temperature in degrees Fahrenheit. 2.5.8c Use a thermometer to measure the temperature in degrees Celsius. 2.5.8d Estimate temperature in degrees Celsius.				

SECOND GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Geometry	**Geometry**				
Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	2.1.8a Demonstrate how fractions (including unit fractions) show parts of a whole using drawings. 2.1.8b Demonstrate how fractions (including unit fractions) show parts of a whole using models. 2.1.8c Demonstrate how fractions (including unit fractions) show parts of a group (set) using drawings. 2.1.8d Demonstrate how fractions (including unit fractions) show parts of a group (set) using models.				
Mathematical Practices	**Mathematical Practices**				
Use addition and subtraction within 100 to solve one-and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	2.6.1a Select the best strategy and materials to solve mathematical problems.				

	SECOND GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	2.6.2a Select the appropriate tools, such as objects or drawings, to model given mathematical problems.				
Explain why addition and subtraction strategies work, using place value and the properties of operations.3	2.6.3a Explain the reasoning used in solving a problem. 2.6.3b Justify the selected procedures in solving a problem.				
	2.6.4a Perform precise calculations. 2.6.4b Evaluate the validity of the results within the context of the problem.				
	2.6.5a Describe connections between two problems. 2.6.5b Apply understanding of one problem to solve another problem.				

THIRD GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Quarter 1	**Quarter 1**				
Number and Operations in Base 10 (3.NBT)	**Number and Operations in Base 10 (3.NBT)**				
	3.1.1a Write a number up to 1,000 in standard form when hearing the oral form of the number. 3.1.1b Write a number up to 1,000 when shown a model of the number. 3.1.1c Write a number up to 1,000 when given the word form of the number. 3.1.1d Read orally a number up to 1,000 when given the standard form of the number. 3.1.1e Read orally a number up to 1,000 when given the word form of the number. 3.1.1f Count by 100s to 1,000. 3.1.1g Name a series of numbers that follow a given a number less than 1,000.				
	3.1.2a Name the digit located in the ones, tens, and hundreds place in a given number.				
	3.1.4a Decompose any number up to 1,000 in various combinations of hundreds, tens, and ones (i.e., 3 hundreds, 2 tens, 5 ones). 3.1.4b Write in standard form a number up to 1,000 that is given in a different combination of hundreds, tens, and ones.				
	3.1.5a Compare whole numbers up to 1,000. 3.1.5b Arrange whole numbers up to 1,000 in numerical order.				
Use place value understanding to round whole numbers to the nearest 10 or 100.	3.1.6a Round numbers less than one hundred to the nearest ten. 3.1.6b Round numbers less than one thousand to the nearest hundred.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
	3.1.7a Classify numbers up to 1,000 as even or odd. 3.1.7b Describe what determines if a number is even or odd.				
Operations and Algebraic Thinking (3.OA)	**Operations and Algebraic Thinking (3.OA)**				
Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	3.2.1a Add numbers up to 1,000 without regrouping using relevant properties of the number system. 3.2.1b Subtract numbers up to 1,000 without regrouping using relevant properties of the number system. 3.2.1c Add numbers up to 1,000 with regrouping, using relevant properties of the number system. 3.2.1d Subtract numbers up to 1,000 with regrouping, using relevant properties of the number system. 3.2.1e Use inverse operations to check computation in addition and subtraction.				
Measurement and Data (3.MD)	**Measurement and Data (3.MD)**				
	3.1.14a Identify whether everyday events are certain, likely, unlikely, or impossible.				
	3.1.15a Define probability. 3.1.15b Record the possible outcomes for a simple probability experiment with six or fewer outcomes. 3.1.15c Identify situations in which simple probability may be used.				
	3.5.10a Determine which symbol (¢ or $) to use after finding the value of any collection of coins and bills. Understand that 20¢ is the same as $0.20.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
	3.5.11a Determine the total cost of more than one item. 3.5.11b Determine whether there is enough money given a certain amount to buy more than one item.				
Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	3.5.9a Tell time to the nearest 5-minutes. 3.5.9b Determine the time it would be one hour after a given time. Repeat for any number of hour intervals. 3.5.9c Determine the number of hours between two times that have the same number of minutes (Ex: How many hours between 11:15 and 2:15?). 3.5.9d Tell time to the nearest minute. 3.5.9e Determine what time it will be in any number of five-minute intervals (up to an hour) after a given time that falls on a five-minute interval. 3.5.9f Determine the amount of time between any two given times.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Quarter 2	**Quarter 2**				
Operations and Algebraic Thinking (3.OA)	**Operations and Algebraic Thinking (3.OA)**				
Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	3.2.2a Represent the concept of multiplication as equal groups using pictures or objects. 3.2.2b Represent the concept of multiplication as equal groups using repeated addition. 3.2.2c Represent the concept of multiplication as a rectangular array. 3.2.2d Represent the concept of multiplication as equal hops on a number line.				
Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.	3.2.3a Represent the concept of division as equal sharing. 3.2.3b Represent the concept of division as forming equal groups. 3.2.3c Represent the concept of division as repeated subtraction.				
Apply properties of operations as strategies to multiply and divide. Understand division as an unknown-factor problem.	3.2.4a Explain the inverse relationship between multiplication and division facts (e.g., 6 x 7 = 42, 42 ÷ 7 = 6, 7 x 6 = 42, 42 ÷ 6 = 7). 3.2.4b Write a related division fact for a given multiplication fact. 3.2.4c Write a related multiplication fact for a given division fact.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	3.2.5a Show mastery of multiplication facts for two. 3.2.5b Show mastery of multiplication facts for five. 3.2.5c Show mastery of multiplication facts for ten.				
	3.3.5a Extend number patterns using multiplication. 3.3.5b Create number patterns using multiplication. 3.3.5c Describe the patterns created and extended using multiplication.				
Number and Operations --Fractions (3.NF)	**Number and Operations --Fractions (3.NF)**				
Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model	3.1.10a Compare fractions with the same denominator when given objects or pictures. 3.1.10b Compare fractions with the same denominator when given two fractions. 3.1.10c Compare fractions using the benchmark fraction of ½. 3.1.10d Compare fractions with different denominators when given objects or pictures.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
**Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model. **Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	3.1.8a Define the term equivalent as having the same value. 3.1.8b Draw and write different fractions to represent the whole number one. 3.1.8c Write two fractions to describe the same shaded region. 3.1.8d Represent equivalent fractions by shading congruent figures. 3.1.8e Extend a picture pattern to demonstrate equivalent fractions as part of a set. 3.1.8f Extend a number pattern to demonstrate equivalent fractions. 3.1.8g Write two fractions to describe a point on a number line. 3.1.8h Plot equivalent fractions on a number line. 3.1.8j Determine whether two fractions are equivalent.				
Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.	3.1.9a Identify the numerator and the denominator in a given fraction. 3.1.9b Discuss a fraction using the terms "numerator" and "denominator."				
	3.2.6a Add and subtract simple fractions with the same denominator using models. 3.2.6b Add and subtract simple fractions with the same denominator. 3.2.6c Explain why the denominator stays the same.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
THIRD GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
Measurement and Data (3.MD)	**Measurement and Data (3.MD)**				
	3.4.6a Define the terms point, line, and line segment correctly. 3.4.6b Use the terms point, line, and line segment in describing two-dimensional shapes.				
	3.4.7a Draw line segments and lines using a straightedge. 3.4.7b Draw line segments to a given length using a straightedge.				
	3.5.12a Carry out simple unit conversions with a measurement system (e.g., centimeters to meters; hours to minutes.)				
Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	3.5.1a Point and count the half-inch intervals on a ruler. 3.5.1b Locate position of half-inches on a ruler. 3.5.1c Locate the nearest half-inch on a ruler when given a point on the ruler and understand that each whole inch can be considered the nearest half-inch. 3.5.1d Measure line segments to the nearest half-inch and record using proper units.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	3.5.2a Recognize when a given quantity can be grouped into a known unit (e.g., 15 inches are more than one foot; 241 centimeters is more than a meter). 3.5.2b Regroup a given quantity into other units (e.g., 15 inches = 1 foot 3 inches). 3.5.2c Add units of length that may require regrouping of inches to feet or centimeters to meters.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Quarter 3	**Quarter 3**				
Measurement and Data (3.MD)	**Measurement and Data (3.MD)**				
Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	3.5.3a Explain orally that perimeter is the measurement around a shape. 3.5.3b Find the perimeter of a shape by using appropriate tools to measure. Record and label results. 3.5.3c Explain how to find the perimeter of a shape.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Recognize area as an attribute of plane figures and understand concepts of area measurement. **A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. **A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. Relate area to the operations of multiplication and addition. **Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. **Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning. **Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	3.5.4a Define area as the number of square units needed to cover a shape. 3.5.4b Estimate the number of square units in a shape. Record and label results.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4

THIRD GRADE MATHEMATICS

Highlighted quarters represent mastery expected

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	3.5.5a Define volume as the number of cubic units in a three-dimensional shape. 3.5.5b Estimate the number of cubic units that it would take to fill a three-dimensional shape. Record and label results.				
	3.4.10a Label/name geometric shapes and structures found in the environment. 3.4.10b Tell where geometric shapes and structures are found in the environment. 3.4.10c Describe shapes in the environment by referring to their properties, i.e., symmetry and angles.				
	3.4.1a Identify quadrilaterals as four-sided shapes.				
	3.4.2a Identify right angles in shapes and objects. 3.4.2b Decide whether angles are greater or less than a right angle.				
Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	3.4.3a Identify cube, sphere, prism, pyramid, cone, and cylinder. 3.4.3b Describe cube, sphere, prism, pyramid, cone, and cylinder by using the terms faces, vertex (vertices), and edges. 3.4.3c Classify by finding similarities and differences between cubes, spheres, prisms, pyramids, cones, and cylinders.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.*	3.4.4a Identify common solid objects that are the parts needed to make a more complex solid object.				
	3.4.5a Draw a shape that is congruent to another shape.				
	3.4.8a Define symmetry. 3.4.8b Determine whether a line is a line of symmetry in a given shape. 3.4.8c Construct a line of symmetry for a geometric shape.				
	3.4.9a Sketch the mirror image reflections of shapes.				
Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	3.5.4c Find the area of a given shape using square units. Record and label results.				
	3.5.5c Determine the number of cubic units that it would take to fill a three-dimensional shape. Record and label results.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Operations and Algebraic Thinking (3.OA)	**Operations and Algebraic Thinking (3.OA)**				
	3.3.4a Understand and use the commutative and associative properties of multiplication.				
Understand a fraction as a number on the number line; represent fractions on a number line diagram. **Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. **Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	3.3.7a Name the approximate value of a point on a number line labeled by tens. 3.3.7b Plot and label whole numbers up to 100 on a number line divided into ten equal parts. 3.3.7c Name the approximate value of a point on a number line labeled by hundreds. 3.3.7d Plot and label whole numbers up to 1,000 on a number line divided into ten equal parts.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
Quarter 4	**Quarter 4**				
Number and Operations in Base Ten (3.NBT)	**Number and Operations in Base Ten (3.NBT)**				
	3.1.11a Identify the tenths and hundredths place of a number. 3.1.11b Read a decimal number in the tenths place and the hundredths place. 3.1.11c Name a decimal orally and write it to represent tenths and hundredths when given a model.				
	3.1.12a Write the fraction equivalent of a decimal for tenths.				
Measurement and Data (3.MD)	**Measurement and Data (3.MD)**				
Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	3.1.13a Interpret data displayed in a circle graph both orally and in writing.				
Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	3.5.6a Explain that capacity is the amount that a container can hold. 3.5.6b Recognize common tools which can be used to measure capacity such as quarts, gallons, and liters. 3.5.6c Estimate the capacity for a given container. Then measure the capacity using appropriate tools. Label and record results.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	3.5.7a Estimate and measure weight using pounds and kilograms.				
	3.5.8a Compare temperatures in Celsius and Fahrenheit.				
Operations and Algebraic Thinking (3.OA)	**Operations and Algebraic Thinking (3.OA)**				
Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	3.2.7a Determine whether answers are reasonable in addition and subtraction problems using rounding, front-end estimation and convenient (sometimes called friendly or compatible) numbers.				
	3.2.8a Add or subtract with numbers less than 100 using mental math.				
Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem	3.3.1a Identify an expression and an equation. 3.3.1b Write an expression and an equation with an unknown quantity (variable) to match a given situation.				
Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = _ ÷ 3, 6 × 6 = ?*	3.3.2a Solve for an unknown quantity (variable) when given an equation.				
	3.3.3a Choose appropriate symbols for operations and relations to make a number sentence true.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
	3.3.6a Solve simple problems involving a functional relationship between two quantities.				
Mathematical Practices (for the whole year) The Process Standards should be addressed throughout the course. Students build new mathematical knowledge through problem solving; solve problems that arise in mathematics and in other contexts; apply and adapt a variety of appropriate strategies to solve problems; and monitor and reflect on the process of mathematical problem solving					
Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	3.6.1a Analyze problems by identifying relationships. 3.6.1b Analyze problems by telling relevant from irrelevant information. 3.6.1c Analyze problems by sequencing and prioritizing information. 3.6.1d Analyze problems by observing patterns.				
	3.6.2a Decide when and how to break a problem into simpler parts.				
	3.6.3a Apply strategies and results from simpler problems to solve more complex problems.				

	THIRD GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	**Q4**
	3.6.4a Express solutions clearly and logically by using the appropriate mathematical terms and notation. 3.6.4b Provide verbal and/or symbolic evidence to support solutions.				
	3.6.5a Recognize the relative advantages of exact and approximate solutions to problems. 3.6.5b Give answers to a specified or appropriate degree of accuracy.				
	3.6.6a Know and apply appropriate methods for estimating results of whole number computations.				
	3.6.7a Make precise calculations and check the validity of the results in the context of the problem. 3.6.7b Explain whether a solution is reasonable in the context of the original situation.				
	3.6.9a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 1	**Quarter 1**				
Number and Operations in Base Ten - Learning Targets	**Number and Operations in Base Ten - Learning Targets**				
Generalize place value understanding for multi-digit whole numbers.	4.1.1a Read (orally) whole numbers up to 1,000,000.				
1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.	4.1.1b Write whole numbers up to 1,000,000 in standard form.				
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	4.1.1c Write whole numbers up to 1,000,000 in word form.				
3. Use place value understanding to round multi-digit whole numbers to any place. Use place value understanding and properties of operations to perform multi-digit arithmetic.	4.1.1d Write whole numbers up to 1,000,000 in expanded form.				
4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.	4.1.2a Write whole numbers up to 1,000,000 given a place value model.				
5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	4.1.2b Represent numbers with base ten blocks and place-value charts.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. place value understanding for multi-digit whole numbers.	4.1.3c Round whole numbers up to 10,000 to the nearest thousand.				
	4.1.4a Compare whole numbers up to 100,000, using >, <, =.				
	4.1.4b Order whole numbers from least to greatest up to 100,000 on a number line.				
	4.1.4c Order whole numbers up to 100,000 from greatest to least on a number line.				
	4.1.4d Order a series of whole numbers up to 100,000 from both greatest to least and least to greatest.				
	4.1.9a Round two-place decimals to tenths.				
	4.1.9b Round two-place decimals to the nearest whole number.				
	4.2.11a/4.7.7a Identify and apply strategies used to estimate results of any whole-number computation. 4.2.12a Calculate by using addition any multi-digit whole numbers rounded to hundreds or thousands using mental math.				
	4.2.12b Use mental mathematics to subtract numbers rounded to hundreds or thousands.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.2.1a Define standard algorithm.				
	4.2.1b Calculate by using addition a group of (more than 2) multi-digit whole numbers, without regrouping, using the standard algorithm.				
	4.2.1c Add any multi-digit whole numbers, with regrouping, using properties of the number system.				
	4.2.1d Subtract any multi-digit whole numbers, without regrouping, using properties of the number system.				
	4.2.1e Subtract any multi-digit whole numbers, with regrouping, using properties of the number system.				
	4.2.1f Select and describe an appropriate method for addition and subtraction for any group of whole numbers. Justify your answer.				
	4.2.2a Represent as multiplication any situation involving repeated addition.				
	4.2.2b Write a number sentence, using multiplication, for a numerical representation of repeated addition.				
	4.2.2c Represent the concept of multiplication of whole numbers using arrays.				
	4.2.3a Represent division as sharing of objects or number of groups of shared objects.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
	4.2.3b Write a number sentence, using division, for a pictorial representation of sharing of objects.				
	4.2.4a Recite and write multiplication facts for numbers between 1 and 10.				
	4.2.4b Recite and write division facts that have whole number quotients between 1 and 10.				
	4.2.4c Demonstrate mastery of multiplication facts 1 through 10 and corresponding division facts.				
	4.2.7a Explain why a number cannot be divided by 0.				
	4.2.7b Apply the identity property of multiplication in both multiplication and division.				
	4.2.7c Apply the zero property of multiplication in both multiplication and division.				
	4.2.7d Solve multiplication problems involving the identity and zero properties.				
	4.2.7e Solve division problems involving the identity and zero properties.				
	4.2.9a Add decimals (to hundredths), using objects or pictures.				
	4.2.9b Subtract decimals (to hundredths), using objects and pictures.				
	4.3.6a Identify and apply the relationships between addition and multiplication.				
	4.3.6b Identify and apply the relationships between subtraction and division.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.3.6c Identify and apply the inverse relationship between multiplication and division to solve problems.				
	4.3.8a Plot whole numbers on a number line up to 100.				
	4.3.8b Plot whole numbers on a number line up to 10,000.				
	4.1.3a Round whole numbers up to 10,000 to the nearest ten.				
	4.1.3b Round whole numbers up to 10,000 to the nearest hundred.				
	4.2.10a Use a standard algorithm to add decimals (to hundredths).				
	4.2.10b Use a standard algorithm to subtract decimals (to hundredths).				
	4.1.1a Read (orally) whole numbers up to 1,000,000.				
	4.1.1b Write whole numbers up to 1,000,000 in standard form.				
	4.1.1c Write whole numbers up to 1,000,000 in word form.				
	4.1.1d Write whole numbers up to 1,000,000 in expanded form.				
	4.1.2a Write whole numbers up to 1,000,000 given a place value model.				
	4.1.2b Represent numbers with base ten blocks and place-value charts.				
	4.1.3c Round whole numbers up to 10,000 to the nearest thousand.				
	4.1.4a Compare whole numbers up to 100,000, using >, <, =.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.1.4b Order whole numbers from least to greatest up to 100,000 on a number line.				
	4.1.4c Order whole numbers up to 100,000 from greatest to least on a number line.				
	4.1.4d Order a series of whole numbers up to 100,000 from both greatest to least and least to greatest.				
	4.1.9a Round two-place decimals to tenths.				
	4.1.9b Round two-place decimals to the nearest whole number.				
	4.2.11a/4.7.7a Identify and apply strategies used to estimate results of any whole-number computation.				
	4.2.12a Calculate by using addition any multi-digit whole numbers rounded to hundreds or thousands using mental math.				
	4.2.12b Use mental mathematics to subtract numbers rounded to hundreds or thousands.				
	4.2.1a Define standard algorithm.				
	4.2.1b Calculate by using addition a group of (more than 2) multi-digit whole numbers, without regrouping, using the standard algorithm.				
	4.2.1c Add any multi-digit whole numbers, with regrouping, using properties of the number system.				
	4.2.1d Subtract any multi-digit whole numbers, without regrouping, using properties of the number system.				

CCSS	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	4.2.1e Subtract any multi-digit whole numbers, with regrouping, using properties of the number system.				
	4.2.1f Select and describe an appropriate method for addition and subtraction for any group of whole numbers. Justify your answer.				
	4.2.2a Represent as multiplication any situation involving repeated addition.				
	4.2.2b Write a number sentence, using multiplication, for a numerical representation of repeated addition.				
	4.2.2c Represent the concept of multiplication of whole numbers using arrays.				
	4.2.3a Represent division as sharing of objects or number of groups of shared objects.				
	4.2.3b Write a number sentence, using division, for a pictorial representation of sharing of objects.				
	4.2.4a Recite and write multiplication facts for numbers between 1 and 10.				
	4.2.4b Recite and write division facts that have whole number quotients between 1 and 10.				
	4.2.4c Demonstrate mastery of multiplication facts 1 through 10 and corresponding division facts.				
	4.2.7a Explain why a number cannot be divided by 0.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.2.7b Apply the identity property of multiplication in both multiplication and division.				
	4.2.7c Apply the zero property of multiplication in both multiplication and division.				
	4.2.7d Solve multiplication problems involving the identity and zero properties.				
	4.2.7e Solve division problems involving the identity and zero properties.				
	4.2.9a Add decimals (to hundredths), using objects or pictures.				
	4.2.9b Subtract decimals (to hundredths), using objects and pictures.				
	4.3.6a Identify and apply the relationships between addition and multiplication.				
	4.3.6b Identify and apply the relationships between subtraction and division.				
	4.3.6c Identify and apply the inverse relationship between multiplication and division to solve problems.				
	4.3.8a Plot whole numbers on a number line up to 100.				
	4.3.8b Plot whole numbers on a number line up to 10,000.				
	4.1.3a Round whole numbers up to 10,000 to the nearest ten.				
	4.1.3b Round whole numbers up to 10,000 to the nearest hundred.				
	4.2.10a Use a standard algorithm to add decimals (to hundredths).				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.2.10b Use a standard algorithm to subtract decimals (to hundredths).				
MEASUREMENT AND DATA - LEARNING TARGETS	**MEASUREMENT AND DATA - LEARNING TARGETS**				
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	4.5.10a Calculate the amount of change from a purchase.				
1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	4.5.3a Derive the formula for perimeter of a square by modeling multiplication as repeated addition.				
2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	4.5.3b Calculate the perimeter of rectangles and squares by adding all sides.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.	4.5.3c Calculate the perimeter of rectangles and squares using standard formulas.				
	4.5.3d Select appropriate units of measurement for finding perimeter (in, ft, yd, cm, m).				
	4.5.3e Memorize and calculate formula for perimeter of rectangles and squares.				
Mathematical Practices (Ongoing)	**Mathematical Practices (Ongoing)**				
	4.7.10a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.				
	4.7.1a Analyze problems by identifying relationships.				
	4.7.1b Analyze problems by telling relevant from irrelevant information				
	4.7.1c Analyze problems by sequencing and prioritizing information.				
	4.7.1d Analyze problems by observing patterns.				
	4.7.2a Decide when and how to break a problem into simpler parts.				
	4.7.3a Apply strategies and results from simpler problems to solve more complex problems.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.7.4a Solve problems, justify arguments, and make conjectures by using a variety of methods such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models.				
	4.7.5a Express solutions clearly and logically by using appropriate mathematical terms and notation.				
	4.7.5b Provide verbal and/or symbolic evidence to support solutions.				
	4.7.6a Name the relative advantages of exact and approximate solutions to problems.				
	4.7.6b Give answers to a specified or appropriate degree of accuracy.				
	4.7.7a Estimate and apply appropriate methods for estimating results of whole-number computations.				
	4.7.8a Make precise calculations and check the validity of the results in the context of the problem.				
	4.7.9a Explain whether a solution is reasonable in the context of the original situation.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 2	**Quarter 2**				
Number and Operations - Fractions - Learning Targets	**Number and Operations - Fractions - Learning Targets**				
Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	4.1.5a Name and write whole numbers as fractions.				
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.4 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.	4.1.6a Define and explain mixed numbers as whole numbers and a fraction.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	4.1.6b Name and write mixed numbers using objects or pictures.				
7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	4.1.7a Describe an improper fraction as larger than a whole number.				
	4.1.7b Write an improper fraction when given pictures or objects.				
	4.1.8a Write tenths in decimal and fraction notations.				
	4.1.8b Write hundredths in decimal and fraction notations.				
	4.1.8c Name and write the fraction and decimal equivalents for halves and fourths.				
	4.2.8a Explain the need for a common denominator when adding and subtracting fractions.				
	4.2.8b Add simple fractions with different denominators using objects or pictures.				
	4.2.8c Subtract simple fractions with different denominators, using objects or pictures.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
NUMBER AND OPERATION IN BASE TEN - LEARNING TARGETS	**NUMBER AND OPERATION IN BASE TEN - LEARNING TARGETS**				
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	4.2.5a Multiply numbers up to 100 by numbers up to 10 using a standard algorithm, using relevant properties of the number system.				
	4.2.6a Demonstrate and explain the steps (standard algorithm) used to divide numbers up to 100 by numbers up to 10 without remainders.				
	4.2.6b Solve division problems up to 100 by numbers up to 10 without remainders.				
MEASUREMENT AND DATA - LEARNING TARGETS	**MEASUREMENT AND DATA - LEARNING TARGETS**				
1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a twocolumn table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	4.3.2a Explain a formula including an explanation of the relationship between quantities.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.3.2b Write formulas substituting letters or symbols for words.				
	4.3.7a Write number sentences involving multiplication and division to solve word problems.				
	4.5.3a Derive the formula for perimeter of a square by modeling multiplication as repeated addition.				
	4.5.3b Calculate the perimeter of rectangles and squares by adding all sides.				
	4.5.3c Calculate the perimeter of rectangles and squares using standard formulas.				
	4.5.3d Select appropriate units of measurement for finding perimeter (in, ft, yd, cm, m).				
	4.5.3e Memorize and calculate formula for perimeter of rectangles and squares.				
	4.5.4a Calculate the area of rectangles and squares using standard formulas.				
	4.5.4b Select appropriate units for measurement of area (sq. in., sq. ft., sq. yd., sq. cm., sq. m.).				
	4.5.4c Memorize and calculate area formula for rectangles and squares.				
	4.5.5a Estimate the area of rectangular shapes by using appropriate units such as square centimeter (cm^2), square meter (m^2), square inch (in^2), or square yard (yd^2).				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.5.5b Calculate the area of rectangular shapes by using appropriate units, such as square centimeter (cm²), square meter (m²), square inch (in²), or square yard (yd²).				
	4.5.6a Demonstrate and explain why rectangles with the same area can have different perimeters.				
	4.5.6b Recognize and show that rectangles with the same perimeter can have different areas.				
	4.5.6c Explain why rectangles with the same perimeters can have different areas.				
	4.5.7a Subdivide shapes into basic shapes.				
	4.5.7b Calculate area of subdivided shapes, such as rectangles, to find the area of the complete shape.				
GEOMETRY - LEARNING TARGETS MASTERED	**GEOMETRY - LEARNING TARGETS MASTERED**				
	4.4.1a Identify, describe, and draw rays using appropriate mathematical tools and technology.				
	4.4.1b Identify, describe, and draw right angles using appropriate mathematical tools and technology.				
	4.4.1c Identify, describe, and draw obtuse angles using appropriate mathematical tools and technology.				
	4.4.1d Identify, describe, and draw straight angles using appropriate mathematical tools and technology.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	4.4.1e Identify, describe, and draw acute angles using appropriate mathematical tools and technology.				
	4.4.2a Identify, describe, and draw parallel lines using appropriate mathematical tools and technology.				
	4.4.2b Identify, describe, and draw perpendicular lines using appropriate mathematical tools and technology.				
	4.4.2c Identify, describe, and draw oblique lines using appropriate mathematical tools and technology.				
MATHEMATICAL PRACTICES - ONGOING	MATHEMATICAL PRACTICES - ONGOING				
	4.7.10a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.				
	4.7.1a Analyze problems by identifying relationships.				
	4.7.1b Analyze problems by telling relevant from irrelevant information				
	4.7.1c Analyze problems by sequencing and prioritizing information.				
	4.7.1d Analyze problems by observing patterns.				
	4.7.2a Decide when and how to break a problem into simpler parts.				
	4.7.3a Apply strategies and results from simpler problems to solve more complex problems.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.7.4a Solve problems, justify arguments, and make conjectures by using a variety of methods such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models.				
	4.7.5a Express solutions clearly and logically by using appropriate mathematical terms and notation.				
	4.7.5b Provide verbal and/or symbolic evidence to support solutions.				
	4.7.6a Name the relative advantages of exact and approximate solutions to problems.				
	4.7.6b Give answers to a specified or appropriate degree of accuracy.				
	4.7.7a Know and use appropriate methods for estimating results of whole-number computations.				
	4.7.7b Identify appropriate methods for estimating results of whole-number computations.				
	4.7.8a Make precise calculations and check the validity of the results in the context of the problem.				
	4.7.9a Explain whether a solution is reasonable in the context of the original situation.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 3	**Quarter 3**				
Geometry- Learning Target	**Geometry- Learning Target**				
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	4.4.3a Identify, describe, and draw parallelograms using appropriate mathematical tools and technology.				
1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	4.4.3b Identify, describe, and draw rhombuses using appropriate mathematical tools and technology.				
2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	4.4.3c Identify, describe, and draw trapezoids using appropriate mathematical tools and technology.				
3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	4.4.4a Identify congruent quadrilaterals by using attributes, such as sides, angles, parallels, and perpendiculars.				
	4.4.4b Classify and explain congruent quadrilaterals by using attributes (properties), such as sides, angles, parallels, and perpendiculars.				
	4.4.5a Identify and draw lines of symmetry in polygons.				
	4.4.6a Describe (orally and in writing) the attributes (faces, edges, and vertices) of cubes.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.4.6b Describe (orally and in writing) the attributes (faces, edges, and vertices) of prisms				
	4.4.6c Construct cubes and prisms.				
MEASUREMENT AND DATA - LEARNING TARGETS MASTERED	**MEASUREMENT AND DATA - LEARNING TARGETS MASTERED**				
Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	4.5.1a Measure length to the nearest quarter-inch.				
	4.5.1b Measure length to the nearest eighth-inch.				
	4.5.1c Measure length to the nearest millimeter.				
	4.5.2a Convert units of length that may require renaming of feet to inches.				
	4.5.2b Convert units of length that may require renaming of meters to centimeters.				
	4.5.2c Solve subtraction problems involving converting units of length.				
	4.5.8a Compare the difference between volume and capacity.				
	4.5.8b Identify and measure volume and capacity as different ways of measuring the space inside a shape.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.5.9a Add time intervals involving hours and minutes.				
	4.5.9b Convert minutes to hours when solving problems involving time intervals.				
	4.5.9c Convert minutes to hours when calculating problems that involve time intervals.				
MATHEMATICAL PRACTICES: ONGOING	**MATHEMATICAL PRACTICES: ONGOING**				
	4.7.10a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.				
	4.7.1a Analyze problems by identifying relationships.				
	4.7.1b Analyze problems by telling relevant from irrelevant information				
	4.7.1c Analyze problems by sequencing and prioritizing information.				
	4.7.1d Analyze problems by observing patterns.				
	4.7.2a Decide when and how to break a problem into simpler parts.				
	4.7.3a Apply strategies and results from simpler problems to solve more complex problems.				
	4.7.4a Solve problems, justify arguments, and make conjectures by using a variety of methods such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
	4.7.5a Express solutions clearly and logically by using appropriate mathematical terms and notation.				
	4.7.5b Provide verbal and/or symbolic evidence to support solutions.				
	4.7.6a Recognize the relative advantages of exact and approximate solutions to problems.				
	4.7.6b Give answers to a specified or appropriate degree of accuracy.				
	4.7.7b Identify appropriate methods for estimating results of whole-number computations.				
	4.7.8a Make precise calculations and check the validity of the results in the context of the problem.				
	4.7.9a Explain whether a solution is reasonable in the context of the original situation.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 4	**Quarter 4**				
OPERATIONS AND ALGEBRAIC THINKING - LEARNING TARGETS	**OPERATIONS AND ALGEBRAIC THINKING - LEARNING TARGETS**				
Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	4.3.1a Define the term variable as a concept for representing an unknown number.				
	4.3.1b Identify an unknown number in an equation or expression as a variable using letters, boxes, or other symbols.				
	4.3.1c Represent an unknown number in an equation or expression as a variable using letters, boxes, or other symbols.				
	4.3.1d Solve unknown variable when given a simple expression, equations, or inequalities.				
	4.3.3a Recognize that multiplication and division are performed before addition and subtraction in expressions without parentheses.				
	4.3.3b Write expressions without parentheses including multiplication, division, addition, and subtraction.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	4.3.3c Solve expressions without parentheses that include multiplication, division, addition, and subtraction.				
	4.3.4a Identify a rule for finding a second number when a first number is given.				
	4.3.4b Solve equations to find a second number when the first number is given.				
	4.3.5a Complete number patterns using multiplication and division.				
MEASUREMENT AND DATA: LEARNING TARGETS	**MEASUREMENT AND DATA: LEARNING TARGETS**				
Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	4.6.1a Plot data on a number line.				
	4.6.1b Display data in a table.				
	4.6.1c Represent data on a line plot.				
	4.6.2a Interpret data graphs (line plots, frequency tables) to answer questions about a situation using the words "most," "few," and "none."				
	4.6.2b Analyze and describe data patterns using the words "most," "few," and "none" on a line plot.				
	4.6.3a Display results of a probability experiment.				

FOURTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	4.6.3b Summarize data results of probability experiments.				
	4.6.3c Produce graphs from data collected to display results.				
MATHEMATICAL PRACTICES - ONGOING Note: Students should use these strategies nearly every day. These learning targets can only be assessed in conjunction with other learning targets, and should not be viewed as stand-alone targets.	**MATHEMATICAL PRACTICES - ONGOING Note: Students should use these strategies nearly every day. These learning targets can only be assessed in conjunction with other learning targets, and should not be viewed as stand-alone targets.**				
Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	4.7.10a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problems.				
2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.1	4.7.1a Analyze problems by identifying relationships.				

	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	4.7.1b Analyze problems by telling relevant from irrelevant information				
	4.7.1c Analyze problems by sequencing and prioritizing information.				
	4.7.1d Analyze problems by observing patterns.				
	4.7.2a Decide when and how to break a problem into simpler parts.				
	4.7.3a Apply strategies and results from simpler problems to solve more complex problems.				
	4.7.4a Solve problems, justify arguments, and make conjectures by using a variety of methods such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models.				
	4.7.5a Express solutions clearly and logically by using appropriate mathematical terms and notation.				
	4.7.5b Provide verbal and/or symbolic evidence to support solutions.				
	4.7.6a Name the relative advantages of exact and approximate solutions to problems.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FOURTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	4.7.6b Give answers to a specified or appropriate degree of accuracy.				
	4.7.7a Know and use appropriate methods for estimating results of whole-number computations.				
	4.7.7b Identify appropriate methods for estimating results of whole-number computations.				
	4.7.8a Make precise calculations and check the validity of the results in the context of the problem.				
	4.7.9a Explain whether a solution is reasonable in the context of the original situation.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 1	**Quarter 1**				
Number Sense	**Number Sense**				
5NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	5.1.1a Convert between whole numbers in words and standard form for numbers up to millions 5.1.1b Covert between numbers in words and standard form for decimals to thousandths 5.1.1c Write decimals to thousandths in expanded form				
5NBT.4. Use place value understanding to round decimals to any place.	5.1.2a Round whole numbers to any place value. 5.1.2b Round decimals to any place value.				
5NBT.3. Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000). b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. 5NBT.4. Use place value understanding to round decimals to any place.	5.1.3a Compare whole numbers using the symbols for less than (<), greater than (>) and equal (=). 5.1.3b Compare decimals to the hundredths using the symbols for less than (<), greater than (>) and equal (=). 5.1.3c Order numbers with decimals to two decimal places. 5.1.3d Explain that the place value to the right is 10 times greater than a given digit and the place value to the left is 1/10 as great as that digit. 5.1.3e Order whole numbers up to one million from both greatest to least and least to greatest.				

FIFTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	5.1.6a List factors of whole numbers. 5.1.6b Explain that a prime number is a number that can be evenly divided only by 1 and itself (e.g., 2, 3, 5, 7, 11). 5.1.6c Explain that a composite number is a number with more than two factors (e.g., 4, 6, 8, 9, 10). 5.1.6d Identify prime and composite numbers by listing factors.				
Computation	**Computation**				
5NBT.2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. 5NBT.5. Fluently multiply multi-digit whole numbers using the standard algorithm. 5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	5.2.1a Multiply any number by a multiple of 10. 5.2.1b Multiply any number by a two-digit number. 5.2.1c Multiply any number by a multiple of 100. 5.2.1d Multiply any number by a triple digit number. 5.2.1e Multiply any whole number by any whole number. 5.2.1f Divide any whole number by a multiple of 10. 5.2.1g Divide any whole number by a two-digit divisor. 5.2.1h Divide any whole number by a three-digit divisor. 5.2.1i Divide any whole number with zero in the quotient. 5.2.1j Divide any whole number by a smaller whole number.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	5.2.5a Add and subtract decimals. 5.2.5b Estimate to determine whether sums of decimal numbers are reasonable.				
	5.2.6a Estimate to determine whether answers are reasonable in addition, subtraction, multiplication and division problems. 5.2.6b Explain orally and in writing whether answers are reasonable in addition, subtraction, multiplication and division				
	5.2.7a Use mental arithmetic to add or subtract simple decimals.				
5NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	5.5.7a Add with money in decimal notation. 5.5.7b Subtract with money in decimal notation.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	5.5.1a Calculate the area of a triangle. 5.5.1b Calculate the area of a parallelogram. 5.5.1c Calculate the area of a trapezoid. 5.5.1d Prove, informally, the formulas for the area of a triangle, parallelogram, and trapezoid. Students should make the connection between these areas and the area of squares.				
	5.5.2a Solve problems involving perimeters of rectangles, triangles, parallelograms, and trapezoids, using appropriate units. 5.5.2b Solve problems involving areas of rectangles, triangles, parallelograms, and trapezoids, using appropriate units.				
	5.5.3a Find the area of complex shapes by dividing them into basic shapes and using formulas for the areas of rectangles and triangles.				
5.MD.3.a,b. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 5MD.4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. 5MD.5 a,b,c. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	5.5.4a Find the surface area of rectangular solids using appropriate units. 5.5.4b Find the volume of rectangular solids using appropriate units.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5.NF.6. Solve real world problems involving multiplication of fractions and mixed numbers,	5.7.1a Analyze problems by identifying relationships. 5.7.1b Analyze problems by telling relevant from irrelevant information. 5.7.1c Analyze problems by sequencing and prioritizing information. 5.7.1d Analyze problems by observing patterns. 5.7.2a Decide when and how to break a problem into simpler parts. 5.7.3a Apply strategies and results from simpler problems to solve more complex problems. 5.7.4a Express solutions clearly and logically by using the appropriate mathematical terms and notation. 5.7.4b Justify solutions with verbal and/or symbolic evidence. number sentence algebraic expression charts, tables, graphs words pictures 5.7.5a Recognize the relative advantages of exact and approximate solutions to problems. 5.7.5b Give answers to a specified or appropriate degree of accuracy. 5.7.6a Know and apply appropriate methods for estimating results of rational number computations. 5.7.7a Make precise calculations and check the fidelity of the results in the context of the problem. 5.7.8a Explain whether a solution is reasonable in the context of the original situation. 5.7.9a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problem.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
Quarter 2	**Quarter 2**				
5.NF.3. Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers,	5.1.5a Explain different interpretations of fractions: parts of a whole, parts of a set, and as division of whole numbers by whole numbers (orally, written and/or with pictures). • parts of a whole • parts of a set • division of whole numbers by whole numbers o What fraction of a pizza will each person get when 3 pizzas are divided equally among 5 people? ÷ (3/5 = 3 5)				
	5.1.7a Plot positive simple fractions on a number line. 5.1.7b Plot positive mixed numbers on a number line. 5.1.7c Plot positive decimals on a number line. 5.1.7d Identify the relative positions of simple fractions, mixed numbers, and decimals.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
FIFTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
5.NF.1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. 5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators,	5.2.2a List multiples of whole numbers up to 10. 5.2.2b Identify common multiples of whole numbers up to 10. 5.2.2c Find equivalent fractions through multiplication or division of numerators and denominators. 5.2.2d Add and subtract fractions with different denominators. 5.2.2e Add mixed numbers with different denominators (with and without regrouping). 5.2.2f Subtract mixed numbers with different denominators (with and without regrouping). Without: 3 4/5 - 2 2/3 = 3 12/15 - 2 10/15 = 1 2/15 With: 3 1/2 - 2 3/4 = 3 2/4 - 2 3/4 = 2 6/4 - 2 3/4 = 3/4				
5.NF6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	5.2.3a Represent multiplication of fractions with models. 5.2.3b Represent division of fractions with models.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5NF.4.a,b Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. 5NF.5.a,b. Interpret multiplication as scaling (resizing), 5NF. 7a,b,c. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.1	5.2.4a Multiply fractions to solve problems. 5.2.4b Divide fractions to solve problems.				
5G.3. Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category.	5.4.1a Measure degrees using a protractor. Concept of the unit of degrees for measurement of angles is based on the 360 º in a circle. 5.4.1b Draw angles using a protractor. 5.4.1c Draw perpendicular and parallel lines. 5.4.1d Construct rectangles and triangles given specific measurements. 5.4.1e/5.4.5a Identify radius and diameter of circles. 5.4.1f/5.4.5b Draw radius and diameter of circles. 5.4.1g Measure radius and diameter of circles. 5.4.1h Construct circles given specific measurements using a compass.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
5G.4. Classify two-dimensional figures in a hierarchy based on properties.	5.4.2a Identify triangles by their sides. equilateral, isoceles, scalene 5.4.2b Describe triangles by their sides. 5.4.2c Draw triangles by their sides. 5.4.2d Classify triangles by their sides. 5.4.2e Identify triangles by their angles. right, acute, obtuse and equiangluar 5.4.2f Describe triangles by their angles. 5.4.2g Draw triangles by their angles. 5.4.2h Classify triangles by their angles.				
	5.4.3a Identify congruent triangles by their sides and angles.				
5MD.3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 5MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. 5MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	5.4.4a Identify polygons. 5.4.4b Describe polygons. 5.4.4c Draw polygons. 5.4.4d Classify polygons				
	5.4.6a Identify shapes that have reflectional symmetry. 5.4.6b Identify shapes that have rotational symmetry.				
	5.4.7a Match 90°, 180°, 270°, and 360° with quarter, half, three-quarters, and full turns, respectively.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	Q1	Q2	Q3	Q4
	5.4.8a Construct a prism using appropriate materials and name its attributes. Prisms are composed of two identical faces connected by lines. For example, a triangluar prism is two trianglar faces connected at their vertices by three lines. The connecting faces are always rectangles. 5.4.8b Construct a pyramid using appropriate materials and name its attributes. Pyramids are composed of one face and one point connected by a line. For example: A rectangluar pyramid connects the vertices of one rectangle to a point with lines. The connecting faces are always triangles.				
	5.4.9a Build an object with blocks given a picture of a three-dimensional object.				

FIFTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Learning Targets	**Learning Targets**				
5NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. 5NF.3. Interpret a fraction as division of the numerator by the denominato (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers,	5.7.1a Analyze problems by identifying relationships. 5.7.1b Analyze problems by telling relevant from irrelevant information. 5.7.1c Analyze problems by sequencing and prioritizing information. 5.7.1d Analyze problems by observing patterns. 5.7.2a Decide when and how to break a problem into simpler parts. 5.7.3a Apply strategies and results from simpler problems to solve more complex problems. 5.7.4a Express solutions clearly and logically by using the appropriate mathematical terms and notation. 5.7.4b Justify solutions with verbal and/or symbolic evidence. number sentence algebraic expression charts, tables, graphs words pictures 5.7.5a Recognize the relative advantages of exact and approximate solutions to problems. 5.7.5b Give answers to a specified or appropriate degree of accuracy. 5.7.6a Know and apply appropriate methods for estimating results of rational number computations. For example, state the answer to the nearest tenth. 5.7.7a Make precise calculations and check the fidelity of the results in the context of the problem. 5.7.8a Explain whether a solution is reasonable in the context of the original situation. 5.7.9a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problem.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4

FIFTH GRADE MATHEMATICS

Highlighted quarters represent mastery expected

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
Quarter 3	**Quarter 3**				
	5.1.4a Represent percents with objects and/or pictures. 5.1.4b Restate decimals to hundredths as percents. 5.1.4c Find decimal and percent equivalents for common fractions. 1/2, 1/3, 1/4, 1/5, 1/10 5.1.4d Explain equivalence of a common fraction and its decimal and percent form.				
Measurement and Data- **25 Day(s) Learning Targets**	**Measurement and Data-** **25 Day(s) Learning Targets**				
	5.3.4a Identify the x and y axes on a coordinate plane. 5.3.4b Explain that the x-axis is a horizontal number line and the y-axis is a vertical number line. 5.3.4c Plot ordered pairs of positive numbers on a coordinate plane.				
5MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	5.5.5a Use smaller and larger Metric units for measuring weight. gram and kilogram 5.5.5b Use smaller and larger Standard units for measuring weight. ounce and pound 5.5.5c Convert grams to kilograms and kilograms to grams. 5.5.5d Convert ounces to pounds and pounds to ounces.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	5.5.6a Compare temperatures in Celsius and Fahrenheit. 5.5.6b Explain that the freezing point of water is 0°C and 32°F. 5.5.6c Explain that the boiling point of water is 100°C and 212°F.				
	5.6.1a Create a line graph to organize data. 5.6.1b Explain the purpose of each type of data display. line plot: for data distribution circle graph: shows relative parts of a whole line graph: shows change bar graph: shows comparison picture graph: shows comparison frequency table: organizes data 5.6.1c Choose and explain which types of displays are appropriate for various sets of data. 5.6.1d Complete missing information in tables, charts, or graphs.				
	5.6.2a Define the mean of a data set. 5.6.2b Define the median of a data set. 5.6.2c Define the mode of a data set. 5.6.2d Define the range of a data set. 5.6.2e Find the mean of a data set. 5.6.2f Find the median of a data set. 5.6.2g Find the mode of a data set. 5.6.2h Find the range of a data set.				

FIFTH GRADE MATHEMATICS

Highlighted quarters represent mastery expected

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	5.7.1a Analyze problems by identifying relationships. 5.7.1b Analyze problems by telling relevant from irrelevant information. 5.7.1c Analyze problems by sequencing and prioritizing information. 5.7.1d Analyze problems by observing patterns. 5.7.2a Decide when and how to break a problem into simpler parts. 5.7.3a Apply strategies and results from simpler problems to solve more complex problems. 5.7.4a Express solutions clearly and logically by using the appropriate mathematical terms and notation. 5.7.4b Justify solutions with verbal and/or symbolic evidence. number sentence algebraic expression charts, tables, graphs words pictures 5.7.5a Recognize the relative advantages of exact and approximate solutions to problems. 5.7.5b Give answers to a specified or appropriate degree of accuracy. 5.7.6a Know and apply appropriate methods for estimating results of rational number computations. For example, state the answer to the nearest tenth. 5.7.7a Make precise calculations and check the fidelity of the results in the context of the problem. 5.7.8a Explain whether a solution is reasonable in the context of the original situation. 5.7.9a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problem.				

FIFTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
Quarter 4	**Quarter 4**				
Operations and Algebraic Thinking	**Operations and Algebraic Thinking**				
	5.3.1a Use a variable to represent an unknown number.				
	5.3.2a Evaluate algebraic expressions with one or two variables through substitution. 5.3.2b Write simple algebraic expressions with one or two variables.				
5OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. 2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	5.3.3a Solve equations involving parentheses, brackets, or braces. 5.3.3b Write equations using parentheses, brackets, or braces. 5.3.3c Solve problems using the distributive property. Note: This would be a great time to name and review the commutative and associative properties of addition and multiplication.				

FIFTH GRADE MATHEMATICS					
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
5G.1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond 5G. 2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.5MD.2. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots.	5.3.4a Identify the x and y axes on a coordinate plane. 5.3.4b Explain that the x-axis is a horizontal number line and the y-axis is a vertical number line. 5.3.4c Plot ordered pairs of positive numbers on a coordinate plane.				
5OA.3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.	5.3.5a Plot ordered pairs on graph paper and connect them with a line. 5.3.5b Create a table of values for x and y that satisfy a given linear equation. 5.3.5c Determine ordered pairs for a linear equation.				

CCSS	Indiana 2000 Learning Target	Q1	Q2	Q3	Q4
	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
	5.3.6a Find the distance between two points on a horizontal line on a coordinate plane. 5.3.6b Find the distance between two points on a vertical line on a coordinate plane. 5.3.6c Find the distance between two points on a vertical or horizontal line on a coordinate plane given only the ordered pair.				
	5.3.7a Answer questions using information from a graph or diagram. 5.3.7b Solve problems using information from equations.				
Measurement and Data	**Measurement and Data**				
	5.6.3a Explain that events that are not going to happen have a probability of 0. 5.6.3b Explain that events that are certain to happen have a probability of 1. 5.6.3c Explain that probabilities that are more likely to occur have a higher numerical probability.				
	5.6.4a Give the experimental probability of a situation verbally and numerically.				

	FIFTH GRADE MATHEMATICS				
Highlighted quarters represent mastery expected					
CCSS	**Indiana 2000 Learning Target**	**Q1**	**Q2**	**Q3**	**Q4**
	Mathematical Processes [Ongoing]				
	Description- Students should use these strategies nearly every day. These learning targets can only be assessed in conjunction with other learning targets, and should not be viewed as stand-alone targets. Learning Targets 5.7.1a Analyze problems by identifying relationships. 5.7.1b Analyze problems by telling relevant from irrelevant information. 5.7.1c Analyze problems by sequencing and prioritizing information. 5.7.1d Analyze problems by observing patterns. 5.7.2a Decide when and how to break a problem into simpler parts. 5.7.3a Apply strategies and results from simpler problems to solve more complex problems. 5.7.4a Express solutions clearly and logically by using the appropriate mathematical terms and notation. 5.7.4b Justify solutions with verbal and/or symbolic evidence. number sentence algebraic expression charts, tables, graphs words pictures 5.7.5a Recognize the relative advantages of exact and approximate solutions to problems. 5.7.5b Give answers to a specified or appropriate degree of accuracy. 5.7.6a Know and apply appropriate methods for estimating results of rational number computations. For example, state the answer to the nearest tenth. 5.7.7a Make precise calculations and check the fidelity of the results in the context of the problem. 5.7.8a Explain whether a solution is reasonable in the context of the original situation. 5.7.9a Note the method of finding the solution and show a conceptual understanding of the method by solving similar problem.				