Focus Topic: CC –Counting and Cardinality

Objective(s)	Common Core Alignment	Essential Questions	Understandings	Suggested Assessments
 TSW count to 100 by ones and by tens 	K.CC.1	Why use numbers?	Numbers have a variety of uses.	Ongoing observation & questioning during class discussions
 TSW count forward beginning from a given number within the known sequence instead of having to begin at 1 	K.CC.2	What do we use numbers for in real life?	Some real-world problems can be solved using known concepts, skills, and strategies.	Performance tasks
 TSW write numbers from 0 to 20 	K.CC.3	How would the world be different if we didn't have numbers?	Some real-world problems can be solved using known concepts, skills, and strategies.	Self-Assessment
 TSW represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects) 	K.CC.3	How much is enough?		Literature Connections
 TSW understand the relationship between numbers and quantities 	K.CC.4	How are whole numbers used in daily life?		Multiple Choice
 TSW connect counting to cardinality 	K.CC.4			
 TSW count objects, say the number names in the standard order, pairing each object with one and only one number 	K.CC.4			
• TSW understand that the last number name said tells the number of objects counted	K.CC.4			
 TSW understand that the number of objects is the same regardless of the arrangement or the order in which they were counted 	K.CC.4			
 TSW understand that each successive number name refers to a quantity that is one larger 	K.CC.4			
 TSW count to answer "how many?" questions about as many as 20 things in an arrangement 	K.CC.5			

 TSW given a number from 1–20, count out that many objects 	K.CC.5		
 TSW identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group 	K.CC.6		Sec
 TSW compare two numbers between 1 and 10 presented as written numerals 	K.CC.7		

Focus Topic: OA – Operations and Algebraic Thinking

Objective(s)	Common Core Alignment	Essential Questions	Understandings	Suggested Assessments
• TSW represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations	K.OA.1	How does knowing basic facts make problem solving easier?	Knowing how to draw picture to solve problems is helpful in checking to see that answers make sense.	Ongoing observation & questioning during class discussions
 TSW solve addition and subtraction word problems including add and subtract within 10 	K.OA.2	How can addition help solve problems?	Some real-world problems can be solved using known concepts, skills, and strategies.	Performance tasks
• TSW decompose numbers less than or equal to 10 into pairs in more than one way (5 = 2 + 3 and 5 = 4 + 1)	K.OA.3	How can I use the plus and minus symbols to help find the sum and difference of a group of numbers?	Most numbers can be described in terms of two parts in a variety of ways.	Self-Assessment
• TSW find the number that makes 10 when added to the given number for any number from 1 to 9	K.OA.4	What happens when you put objects together?	Writing down all the possible ways of doing something is sometimes a good way to solve a problem.	Literature Connections
TSW fluently add and subtract within 5	K.OA.5			Projects

Focus Topic:NBT– Number & Operations in Base Ten

TSW = The Student Will

Objective(s)	Common Core Alignment	Essential Questions	Understandings	Suggested Assessments
• TSW compose and decompose numbers from 11 to 19 into ten ones and some further ones	K.NBT.1	What happens when you put objects together?	Patterns can be represented in a variety of ways.	Ongoing observation & questioning during class discussions
• TSW understanding that the above numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones (18 = 10 + 8)	K.NBT.1			Performance tasks Self-Assessment

Focus Topic:MD – Measurement and Data

Objective(s)	Common Core Alignment	Essential Questions	Understandings	Suggested Assessments
 TSW describe measurable attributes of objects, such as length or weight 	K.MD.1	What things would be impossible without measurement?	There are multiple means to solving most mathematical problems.	Ongoing observation & questioning during class discussions
 TSW describe several measurable attributes of a single object 	K.MD.1	Why do we need standard units of measurement?	Objects can be compared and ordered by size.	Performance tasks
• TSW directly compare two objects with a measurable attribute in common, to see which object has "more of/less of" the attribute, and describe the difference (<i>For example, directly compare the heights of two children and describe one child as taller/shorter</i>)	K.MD.2	Is there such a thing as exact measurement?	The area of a shape can be estimated and measured by counting how many square units it takes to cover the shape.	Self-Assessment
TSW classify objects into given categories	K.MD.3			Literature Connections
• TSW count the numbers of objects in each category and sort the categories by count	K.MD.3			Projects

Focus Topic: G – Geometry

TSW = The Student Will

Objective(s)	Common Core Alignment	Essential Questions	Understandings	Suggested Assessments
• TSW describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i> , <i>below</i> , <i>beside</i> , <i>in front of</i> , <i>behind</i> , and <i>next to</i>	K.G.1	What is the best shape? Why?	Many everyday objects closely approximate standard geometric solids.	Ongoing observation & questioning during class discussions
 TSW correctly name shapes regardless of their orientations or overall size 	K.G.2	How would the world look if there were only (insert any shape)?	Solid figures have many properties which make them different from each other.	Performance tasks
 TSW identify shapes as two-dimensional (lying in a plane, "flat") or three dimensional ("solid") 	K.G.3	If you created the world, what shapes would you use? Why?		Self-Assessment
 TSW analyze and compare two- and three- dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (number of sides and vertices/"corners") and other attributes (having sides of equal length) 	K.G.4			Projects
 TSW model shapes in the world by building shapes from components (sticks and clay balls) and drawing shapes 	K.G.5			Literature Connections
• TSW compose simple shapes to form larger shapes (For example, "Can you join these two triangles with full sides touching to make a rectangle?")	K.G.6			

Hamburg School

Focus Topic: Mathematical Practices

Objective(s)
TSW make sense of problems and persevere in solving them.
TSW reason abstractly and quantitatively.
TSW construct viable arguments and critique the reasoning of others.
TSW model with mathematics.
TSW use appropriate tools strategically.
TSW attend to precision.
TSW look for and make use of structure
TSW look for and express regularity in repeated reasoning.