Student's name: _____Course Name: Mathematics Kindergarten (July 2009)

[C]	Communication	**[PS]**	Problem Solving
[CN]	Connections	**[R]**	Reasoning
[ME]	Mental Mathematics and Estimation	**[T]**	Technology
		[V]	Visualization

Strand: Number	**R**	**D**	**C**	**General Outcome:** Develop number sense.	**Changed Outcome**
Specific Outcomes *It is expected that students will:*				**Achievement Indicators** *The following sets of indicators determine whether students have met the corresponding specific outcome. Other indicators may be added according to teacher preference.*	
KN1. Say the number sequence by 1s, starting anywhere from 0 to 10 and from 10 to 0. [C, CN, V]				KN1.1 Name the number that comes after a given number, zero to nine. KN1.2 Name the number that comes before a given number, one to ten. KN1.3 Recite number names from a given number to a stated number (forward – zero to ten, backward – ten to zero), using visual aids.	
KN2. Subitize (recognize at a glance) and name familiar arrangements of 1 to 6 objects, dots or pictures. [C, CN, ME, V]				KN2.1 Look briefly at a given familiar arrangement of 1 to 6 objects or dots, and identify the number represented without counting. KN2.2 For numbers up to 5, identify the number represented by a given dot arrangement on a five frame and describe the number's relationship to five KN2.3 Identify the number represented by a given dot arrangement and identify the numbers that are one more and one less.	
KN3. Relate a numeral, 1 to 10, to its respective quantity. [CN, R, V]				KN3.1 Construct a set of objects corresponding to a given numeral. KN3.2 Identify the number of objects in a set. KN3.3 Record numerals to represent the number of objects in a given set (1 – 10) KN3.4 Hold up the appropriate number of fingers for a given numeral. KN3.5 Match numerals with pictorial representations.	

Strand: Number (continued)	**R**	**D**	**C**	**General Outcome:** Develop number sense.	**Changed Outcome**
KN4.Represent and describe numbers 2 to 10, in two parts, concretely and pictorially. [C, CN, ME, R, V]				KN4.1 Show a given number as two parts, using fingers, counters or other objects, and name the number of objects in each part. KN4.2 Show a given number as two parts, using pictures, and name the number of objects in each part.	
KN5. Compare quantities 1 to 10 ➢ using one-to-one correspondence ➢ by ordering numbers representing different quantities [C, CN, V]				KN5.1 Construct a set to show *more than*, *fewer than* or *as many as* a given set. KN5.2 Compare two given sets through direct comparison and describe the sets, using words such as *more*, *fewer*, *as many as* or *the same number*.	
KN6. Demonstrate an understanding of conservation of number to 5.				KN.6.1 Count the number of objects in a set and recognize that when the objects are re-arranged the original count is maintained.	

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Strand: Patterns and Relations (Patterns)	**R**	**D**	**C**	**General Outcome:** Use patterns to describe the world and to solve problems.	**Changed Outcome**
Specific Outcomes *It is expected that students will:*				**Achievement Indicators** *The following sets of indicators determine whether students have met the corresponding specific outcome. Other indicators may be added according to teacher preference*	
KPR1. Demonstrate an understanding of repeating patterns (two or three elements) by: • identifying • reproducing • extending • creating patterns using manipulatives, sounds and actions. [C, CN, PS, V]				KPR1.1Distinguish between repeating patterns and non-repeating sequences in a given set by identifying the part that repeats. KPR1.2 Copy a given repeating pattern, e.g., actions, sound, colour, size, shape, orientation, and describe the pattern. KPR1.3 Extend repeating patterns to two more repetitions. KPR1.4 Create a repeating pattern, using manipulatives, musical instruments or actions, and describe the pattern. KPR1.4 Identify and describe a repeating pattern in the classroom, school and outdoors; e.g., in a familiar song, in a nursery rhyme.	

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Strand: Shape and Space (Measurement)	**R**	**D**	**C**	**General Outcome:** Use direct and indirect measurement to solve problems.	**Changed Outcome**
Specific Outcomes *It is expected that students will:*				**Achievement Indicators** *The following sets of indicators determine whether students have met the corresponding specific outcome. Other indicators may be added according to teacher preference.*	
KSS1. Use direct comparison to compare two objects based on a single attribute, such as ➢ length including height ➢ mass ➢ capacity [C, CN, PS, R, V]				KSS1.1 Compare the length or height of two given objects; and explain how they compare using the words *shorter*, *longer*, *taller* or *almost the same*. KSS1.2 Compare the mass of two given objects; and explain how they compare, using the words *lighter*, *heavier* or *almost the same*. KSS1.3 Compare the capacity of two given objects; and explain how they compare, using the words *less*, *more*, *bigger*, *smaller* or *almost the same*.	

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Strand: Shape and Space (3-D Objects and 2-D Shapes)	**R**	**D**	**C**	**General Outcome:** Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.	**Changed Outcome**
Specific Outcomes *It is expected that students will:*				**Achievement Indicators** *The following sets of indicators determine whether students have met the corresponding specific outcome. Other indicators may be added according to teacher preference.*	
KSS2. Sort objects, including 3-D objects, using a single attribute and explain the sorting rule. [C, CN, PS, R, V]				KSS2.1 Identify a common attribute in a given set of 3-D objects. KSS2.2 Sort a set of objects including familiar 3-D objects, using a single attribute such as size or shape, and explain the sorting rule. KSS2.3 Determine the difference between two pre-sorted sets by explaining a sorting rule used to sort them.	
KSS3. Build and describe 3-D objects. [CN, PS, V]				KSS3.1 Create a representation of a given 3-D object, using materials such as modelling clay and building blocks, and compare the representation to the original 3-D object. KSS3.2 Describe a given 3-D object, using words such as *big*, *little*, *round*, *like a box* and *like a can*. Include use of formal names such as spheres, cubes and cylinders.	