Teaching Number Sense – Program
Referenced to Mathematics K-6 Syllabus

Knowledge and Skills	ES1 (Kindergarten) NES1.1	S1 (Year 1) NS1.1-Unit 1		S1 (Year 2) NS1.1-Unit 2		S2 (Years 3 & 4) NS2.1, NS2.3		S3 (Years 5 & 6) NS3.3
Counting **DRAFT**	**Counting 1:1, 1-20** Count 1:1 using concrete objects							
	Counting forward: 1-30 **1**. Count forward 1-30 **2**. Count on from a number (in the range 1-30)	**Counting on: 0-99** Count on from any given single or 2 digit number (begin at any number in the range 0-99)		**Counting on: 0-999** Count on from any given 2 or 3 digit number (begin at any number in the range 0-999)		**Counting on: 0-9999** Count on from any given 3 then 4 digit number in the range 0-9999		
	Counting back: 1-20 **1**. Count backward 20-1 **2**. Count back from a number (in the range 1-20)	**Counting back: 0-99** Count back from any given single or 2 digit number (begin at any number in the range 0-99)		**Counting back: 0-999** Count backward from any given 2 or 3 digit number (begin at any number in the range 0-999)		**Counting back: 0-9999** Count back from any given 3 then 4 digit number in the range 0-9999		
		Counting by 10s: 0-99 **1**. forward *on* the decade **2**. backward *on* the decade **3**. forward *off* the decade **4**. backward *off* the decade	**Skip counting: 0-99** By 2's **1**. forward **2**. backward By 5's **1**. forward **2**. backward	**Counting by 10s: 0-999** (Remember to count across centuries) **1**. forward *on* the decade **2**. backward *on* the decade **3**. forward *off* the decade **4**. backward *off* the decade	**Skip counting: 0-999** By 2s **1**. forward **2**. backward By 5s **1**. forward **2**. backward	**Counting by 100s: 0-9999** **1**. forward *on* the century **2**. backward *on* the century **3**. forward *off* the century **4**. backward *off* the century (Remember to count across centuries & thousands)	**Skip counting: to 10x** 1. 10s 2. 2s 3. 5s 4. 4s 5. 3s 6. 6s 7. 8s 8. 9s 9. 7s **Multiplication Facts to 10x** Develop fact recall to *automaticity* 1. 10x 2. 2x 3. 5x 4. 4x 5. 3x 6. 6x 7. 8x 8. 9x 9. 7x	**Multiplication Facts** *Automatically* recalls multiplication facts when using mental and written strategies to solve problems

Developed by Sydney Region Central North LAP team in consultation with Dr David Evans (Sydney University) and Pat Leberne (Maths consultant) 2007

Knowledge and Skills	ES1 (Kindergarten) NES1.1	S1 (Year 1) NS1.1-Unit 1	S1 (Year 2) NS1.1-Unit 2	S2 (Years 3 & 4) NS2.1	S3 (Years 5 & 6) NS3.1
Sense of sequence, quantity & comparison	**Number after: 1-30** Knowing what the next number is	**A given number after: 2 digits** Identify what number is 5 (or any given number between 1 and 10) after a given 2 digit number (for example – 5 after 49)			
	2 numbers after: 1-30 Knowing what 2 numbers after a given number is	**A given number before: 2 digits** What number comes 4 (or any given number between 1 and 10) before a given 2 digit number (for example – 4 before 91)			
DRAFT	**Ordering: 1-20** Identifying a variety of numbers and order from largest to smallest or smallest to largest (provide visual stimuli, for example 8, 5, 2, 6)	**Ordering: 0-99** Order numbers from smallest to largest or largest to smallest; a sequence of numbers with up to 2 digits in each number (provide visual stimuli)	**Ordering: 0-999** Order numbers from smallest to largest or largest to smallest; a sequence of numbers with up to 3 digits in each number (provide visual stimuli)	**Ordering: 0-9999** Order numbers from smallest to largest or largest to smallest; a sequence of numbers with up to 4 digits in each number (provide visual stimuli)	**Ordering: 4+digits** Order numbers from smallest to largest or largest to smallest; a sequence of numbers with any number of digits in each number (provide visual stimuli)
	Comparison: 1-20 Compare & identify which number is bigger or smaller (using visual stimulus)	**Comparison: 0-99** Identify which number is greater than or less than (automatic recognition using a visual display with 2 numbers, eg. 51 39)		**Comparison: Symbols** Identify symbols for less than and greater than < >	
	Comparison: 1-20 Compare & identify which single digit number is closer (for example 5: 6 or 2 using a distracter shape such as a triangle)	**Comparison: 0-99** Compare & identify which 2 digit number is closer (for example 51: 46 or 53 using a distracter shape such as a triangle, diamond or rectangle)			

Developed by Sydney Region Central North LAP team in consultation with Dr David Evans (Sydney University) and Pat Leberne (Maths consultant) 2007

2

Knowledge and Skills	ES1 (Kindergarten) NES1.1, NES1.2	S1 (Year 1) NS1.1-Unit 1, NS1.2	S1 (Year 2) NS1.1-Unit 2, NS1.2	S2 (Years 3 & 4) NS2.1, NS2.2	S3 (Years 5 & 6) NS3.1
Reads and represents numbers	**Reads numbers to 20**	**Reads numbers to 99**	**Reads numbers to 999**	**Reads numbers to 9999**	**Reads numbers of any size**
	Writes numbers to 20	**Writes numbers to 99**	**Writes numbers to 999**	**Writes numbers to 9999**	**Writes numbers of any size**
Place Value	**Place value: 1-20** Is able to identify how many more than 10 each teen number is	**Place value: 2-digit numbers** States the value of ones (units) and tens, including 0 as a place holder.	**Place value: 3-digit numbers** States the value of ones (units), tens and hundreds, including 0 as a place holder.	**Place value: 4 digits** States the value of any digit in 4 digit numbers, including those with a 0	**Place value: numbers of any size** States the place value of any digit in large numbers
Language	Teach the specific language needed to talk about maths, for example: numeral, digit, pattern and place value (see **separate sheet** for language scope and sequence) and provide opportunities for practice in context.				
Addition & Subtraction DRAFT	**Addition to 20** Combines collections of objects to model addition	**Addition** Uses a variety of strategies to solve addition problems involving 1 and 2 then 2 and 2-digit numbers. Strategies: 1. *Jump* 2. *Split* (See 'Concepts and Strategies' Sequence for further detail.)		**Addition and Subtraction** Uses a variety of strategies to solve addition and subtraction problems involving 2, 3 & 4-digit numbers. (see 'Concepts and Strategies' Sequence sheet for recommended strategy scope and sequence)	
	Subtraction: 1 - 20 Separates collections of objects to model subtraction	**Subtraction** Uses a variety of strategies to solve subtraction problems involving 1 and 2 then 2 and 2-digit numbers. Strategies: 1. *Jump* (See 'Concepts and Strategies' Sequence for further detail.)			

Additional notes