ST GERARDS SCHOOL
LOVE-aroha ai... LEARN-ako ai... GROW-tipu ai

	Mathematics – Measurement – Developing As A Measurer							
	LEVEL 1		**LEVEL 2**		**LEVEL 3**		**LEVEL 4**	
CURRICULUM LEVEL DESCRIPTIONS	Order and compare objects or events by length, area, volume and capacity, weight (mass), turn (angle), temperature, and time by direct comparison and/or counting whole numbers of units.		Create and use appropriate units and devices to measure length, area, volume and capacity, weight (mass), turn (angle),temperature, and time		Use linear scales and whole numbers of metric units for length, area, volume and capacity, weight (mass), angle, temperature, and time.		Use appropriate scales, devices, and metric units for length, area, volume and capacity, weight (mass), temperature, angle, and time. Convert between metric units, using whole numbers and commonly used decimals.	
	After 1 Year at school	**After 2 Years**	**After 3 Years**	**End of Yr4**	**End of Yr5**	**End of Yr6**	**End of Yr7**	**End of Yr8**
NATIONAL	**Compare**	**Compare**	**Measure** the	**Measure** the	**Measure** time	**Measure** time and	**Measure** time	**Use metric** and other standard

STANDARD DESCRIPTIONS	the lengths, areas, volumes or capacities, and weights of objects **directly**	the lengths, areas, volumes or capacities, and weights of objects and the durations of events, **using self-chosen units of measurement**	lengths, areas, volumes or capacities, and weights of objects and the duration of events, **using linear whole-number scales** and applying basic addition facts to standard units	lengths, areas, volumes or capacities, weights, and temperatures of objects and the duration of events. Reading scales to the nearest whole number and **applying addition, subtraction, and simple multiplication to standard units.**	and the attributes of objects, choosing appropriate standard units and working with them to the nearest tenth.	the attributes of objects, choosing appropriate standard units. **Use arrays to find the areas of rectangles** and the volumes of cuboids, given whole number dimensions.	and the attributes of objects, **using metric and other standard measures** **Make simple conversions** between units, using whole numbers **Use** side or edge lengths to find the perimeters and areas of rectangles and parallelograms and the volume of cuboids, given whole number dimensions	measures **Make simple conversions between units, using decimals** **Use** side or edge lengths to find the perimeters and areas of rectangles, parallelograms, and triangles and the volumes of cuboids
PROGRESSIONS OF LEARNING	**Can make** a direct comparison between 2	**Can use** indirect comparison, eg how much bigger	**Knows** the attribute that is being measured, eg height	**Can use** identical non-standard units of measurement,	**Can choose** the appropriate standard unit for a measuring task.	**Can make** a sensible estimate of time, distance and length.	**Can find** the perimeters and areas of rectangles,	**Can use** the correct formula to determine areas of rectangles, parallelograms, triangles and volume of cuboids.

	objects that are similar e.g apples **Can use** practical materials e.g sand, water etc for measuring.	is an object than another **Can make** a prediction before measuring. Can sequence objects Can use non –standard self chosen units to measure	**Can use** identical non-standard units of measurement (may have gaps) **Can use** linear whole number scales e.g rulers or paper) see pg 25 NS Maths Begin their measurements at 0 and read the measurement correctly to the nearest whole number.	e.g (handspans) that fit together with no gaps or overlaps. **Can partition** into parts of units e.g ½, ¼, of cups Canestimate and record the actual capacity e.g how many cubes fit into a box.	(refer to exemplar 3) **Can record** the units in abbreviated forms e.g cm,mm,m km,kg **Can construct** a 3D object from multi linl blocks and talk about how many are contained in the whole. Use PV equipment to make 3D	**Can select** the most appropriate standard measuring tool for a task. **Can convert** between whole number units e.g 100cm= 1m · Can begin to understand and determine the relationship between length and area and length and volume on rectangles and cuboids. Can discuss some history and development in regards to the metric system.	parallelogram and cuboids. **Can begin** to convert between metric units using decimals e.g mm, cm **Can begin** to use formulas for areas of rectangles and cuboids using whole numbers.	**Can convert** accurately between standard metric units.
NUMBER STRATEGIES	Can count the objects they are	Can order numbers	Can join or separate measures	Can use their additive knowledge	Can use place value and decimals with	Can use place value and decimals with	Can use multiplicative Thinking	

	comparing..		verbally e.g 6 handspans and 4 Handspans combine to make 10 handspans	and strategies to find the total number (exemplar 1)	measurement eg. 1/10, 1/100 3)	measurement Can use x1000, /1000 measurement (exemplar 3)		
Mathematical Language	Bigger Heavier Longer Lighter Shorter Hotter Colder Fuller Emptier Further closer	Biggest Smallest Longest Shortest Hottest Coldest Fullest Emptiest Furthermost closet	combined capacity length difference	overlap	kilometre cm3 litre volume millitre cuboids language of convert prefixes metric system	kilogram m2 metre m3 centimetre cm2	Perimeter Parrallelogram formula Area	