

## Mathematics Curriculum – on the boil

### Year Reception

**Pupils need to continuously use mathematical language alongside manipulation of objects to understand the key concepts in Reception.**

Strand	Autumn	Spring	Summer	Key resources and representations
Counting	Counting forwards and backwards to 10 by rote.	Counting forwards and backwards to 10 breaking the count ie. Passing a ball backwards and forwards or counting how many times a puppet pops up.	Counting forwards and backwards to 20 by rote and with breaks in the rhythm.	Puppets, numberlines/ <b>number tracks</b> , counting songs, musical instruments, counting stories
Counting		Count on in 1s from any number up to 20.	Count on and back in 1s from any number up to 20. <b>Say the number that is 1 more/less than a given number.</b>	Counting stick, numberlines/ <b>number tracks</b> , number cards, Numicon shapes
Number and place value	Find a numicon shape/dice shape which is one more/one less than numbers to 10.	Find a numicon shape/dice shape which is one more/one less than teen numbers.	Place sets of objects and numerals in order of size up to 20. Say next number and number before any number to 20.	Numicon, dice cards, counting objects, number cards
Number and place value	Conservation of number – if a group of objects have no more added or taken away the quantity hasn't changed .	To say which group of objects has more or less in it.	To use the words 'more', 'less' 'same as' to compare numbers and sets of objects Order sets of objects and relate to a number line.	Numicon, counting objects Coins, dolls houses, buses, cars, Shake box
Number and place value	Use apparatus to create simple repeating patterns with objects or paint ( <b>2 elements/variables</b> )	Use apparatus to create and continue simple repeating patterns with objects or paint ( <b>3 elements/variables</b> )		Paint, potatoes, cubes, beads, plastic objects, food, Numicon shapes, feely bags
Number and place value	Order sets of objects to 5 alongside numerals and	Order sets of objects to 10 alongside numerals and	Order sets of objects to 20 alongside numerals and	Multi-link, counters Numicon, arrow cards Coins, Straws bundled into tens

	structured apparatus ie. Numicon.	structured apparatus ie. Numicon.	structured apparatus ie. Numicon.	
Number and place value	Conservation of number. Finger flashing up to 5	Conservation of number. Finger flashing up to 10.	Subitise dots up to 6 in regular dice patterns	Fives frames, tens frames, finger flashing, bunny ears, dice, playing cards
Addition and subtraction	Count objects accurately using one to one correspondence		Use stories, pictures, objects to solve addition and subtraction problems up to 20. Practise counting on or back to find the answer	Numicon, Cuisenaire Double sided counters, tens frames, balance pans, fingers Number lines/tracks
Multiplication and division			Show doubling using fingers or objects and using 'real life' situations e.g. double the number of children in the line, insects on the leaf. Chop objects in half and use language to describe what has happened. Half of a group of children to be inside and half to be outside	Playdough, counting objects, fingers
Multiplication and division	Sharing objects between children/toys	Sharing objects between children/toys and checking that it is an equal share (fair).		Arrays, Numicon, counting objects, peg boards, sweets/fruit/drinks

