MATHS NUMBER

P1(i)

Fully prompted touches objects Fully prompted touches a range of textures Experiences movement up and down Experiences movement right and left Experiences movement forward and backwards Opportunity to observe multiples—ie more than 1 person, brick, spoon Assisted to take part in number rhymes With assistance does some actions to number rhymes Opportunity to hear number s and counting Experiences hand tapped to counting Fully prompted touches objects as they are counted

Hears language related to number

P1(ii)

Aware of food textures May respond to noise from others Responds when they knock something which makes a noise Sometimes responds to light patterns With assistance touches a range of shapes With assistance touches edges With assistance touches flat surface With assistance touches corners With assistance experiences a range of textures With assistance is exposed to thing larger and small than self Holds objects for a few seconds Releases objects involuntarily Observes multiple objects—ie more than 1 person, brick, spoon Opportunity to observe a range of objects all the same colour With assistance participates in number rhymes Shows an interest in hand tapped numbers Show some surprise at the sudden presence of an object Show some surprise at the absence of an object

P2(i) Reach and attempt to grasp object Holds given object purposely Holds objects for a minute Looks at object in hand Looks at objects Takes given object Handles everyday objects Handles geometric objects Moves objects through horizontal plane Moves objects through vertical plane Moves objects in circular movements Handles multiples of same object ie more than 1 person, brick, spoon Briefly watches bright object 15 -25 cm from face Follows object held 10 -15 cm from face through 1/4 circle round midline Follows object past midline held within 15 -25 cm from face Follows object vertically when 15-25 cm from face Follows object past midline Raises object to look at it Follows light patterns Aware that an object still exists when out of sight Watches human activity with interest Watches animals with interest Watches moving objects with interest **Recognises familiar routines** Responds if routine is changed

P2(ii)

Plays simple games

Points to objects Reaches for object Reaches for objects offered Reaches for preferred object from a selection of 2 Leads with one hand when reaching for objects Manipulates large objects in hands Manipulates object in hands Turns object in hands Holds object in each hand Drops object deliberately Passes object from one hand to another Shakes and squeezes object placed in hand making sounds unintentionally Immediately squeezes or shakes object they recognise as making a noise Deliberately shakes or squeezes object to make sound Imitates pushing a wheeled object Roll a ball in imitation With assistance takes object out of container With assistance places object in container With assistance puts similar objects together With assistance put objects of the same colour together Follows object through all planes Area of focal interest 3 to 4 metres Looks for object that has been moved from line of vision Looks for object out of sight Recognises familiar people as they approach Watches an object as it falls Turns head to follow light pattern Shows an awareness of texture

P3(i) Selects and shakes objects deliberately to make noise ie rattle Drops object to reach for another Puts an object down Shakes bangs and squeeze an object placed in hand to make sounds. Throws objects haphazardly Throws objects to gain attention Throw object to repeat an effect Watches object as it is thrown or falls Uses index finger to point to object Pokes small objects with index finger Takes object out of container in imitation Puts object in container in imitation Observes an object being put into a container and then remove it Bangs two objects together Rubs surface with hand Rubs a surface with an object Rubs two objects together Area of focal interest 10 metres Repeats an action that has had an effect Remembers simple learned responses over a period of 24 hrs Observes the effect of their action on an object Show an awareness of the purpose of an object **Requests interactive activities Recognises familiar places** Recognises familiar sounds Attempts to do action rhymes Seeks assistance to do action rhymes

P3(ii)

Attempts to put object in specific place Seeks assistance to put object in specific place Places object in a specific place Places objects into container on command Checks that placed object is where they put it Empties a container Looks in container to make sure it is empty Asks to repeat activity Begins to place objects in groups Matches objects Helps stack objects Helps fill objects Pours sand / water out of a container Begins to lines up objects Makes choices from range of 2 Remembers simple learned responses over a period of time. Shows anticipation in line with event(time). Shows anticipation in line with event (action) Shows anticipation when given specific equipment Calls attention to self through actions Is aware of the purpose of familiar objects Uses material appropriately Explores new objects with interest Anticipates result of action ie knocking down tower Finds objects hidden under a container Takes part in action rhymes. Shows an awareness of events related to time of day

Ρ4

Counting and Understanding Number Picks up and puts down single objects Holds 2 objects at a time Puts down an object in order to pick up another Says gone or all gone appropriately Collects objects that interest them Enjoys helping to count objects Uses objects with multiple parts -ie train set Follows counting sequence **Knowing and Using Number Facts** Number Rhymes Enjoys number rhymes Joins in the sound patterns of rhymes Joins in actions in number rhymes Asks for more Calculating Assists with one to one matching activity ie setting table Responds to give me some shells Responds to give me some more shells

Ρ5

Counting and Understanding Number Counts when playing with numbers in any order Holds up a single finger on request Holds up 2 fingers appropriately Indicates one brick on request Indicates 2 bricks on request Make a group of 'one' Make a group of 'lots' Uses term 'one' appropriately Uses term 'lots' appropriately With assistance makes groups of objects **Knowing and Using Number Facts** Number Rhymes Watches finger games Joins in simple finger games Joins in number rhymes Joins in actions with some accuracy Plays with shopping Threads beads on rod Places objects in a line Calculating Picks up more than one object when asked for 2 Begins to matches object to object Begins to matches 2 equal sets Contrasts quantities

P6

Counting and Understanding Number Joins in rote counting to 5 Repeat counting to 3 Counts to two Counts to 3 not always correctly Counts to 3 correctly Counts to 5 not always correctly Copies 1 to 3 claps correctly Points to objects as they count Attempts to count 3 objects Counts real objects to 3 Count objects in pictures to 3 Counts 3 objects correctly Puts out objects to 3 Matches numerals to 5 Counts out 3 1p coins correctly Shows up to 5 fingers correctly with assistance Uses counting in 'play' situations Knowing and Using Number Facts Number Rhymes Joins in known number rhymes Joins in new number rhymes with encouragement Remembers sequence of 3 in song -ie Old Macdonald Plays shopping with up to 5 1p coins Plays game using dice with 1 to 3 spots Plays game using dice with 1 to 5 spots Plays game using dice with 0 to 3 spots Plays game using dice with 0 to 5 spots Selects object from choice of 3 Calculating Completes 3 piece form board One to one matching

Gives each drink a straw Gives object to each person (biscuit) Matches object to object Matches 2 unequal sets Matches 2 equal sets Aware when there are too few for complete 1 to 1 matching Requests more of the correct object to complete 1 to 1 matching Aware when there are too many for complete 1 to 1 matching

Ρ7

Counting and Understanding Number Joins in rote counting to 10 Repeats counting to 5 Counts to 5 correctly Counts to 8 inconsistently Counts objects to 5 Puts out objects to 5 Count objects in picture to 5 Gives numerals to 3 when asked Gives numerals to 5 when asked Names numerals to 5 Sequences numerals to 3 Sequences numerals to 5 Sequences numbers on the computer Reads numbers to 5 on computer screen Matches numbers to 5 on computer Inputs numbers to 5 on computer correctly Puts quantities on numerals Puts out objects to 5 on the computer Matches numerals to quantities Records number counted using dashes or dots Compares 2 sets of counters to 5 pointing to the group that is: - smaller - larger - greater

- fewer
- more
- less

Knowing and Using Number Facts

Joins confidently with more advanced rhymes

- Raises fingers appropriately in rhymes
- Aware of the sequence in the number rhymes

Points out numbers in their environment Calculating Uses one to one matching to solve problems - ie are there enough...? Begins to count objects when asked 'how many......' Add 1 more object and count how many now to 3. Remove 1 object and count how many now to 3. Add 1 more object and count how many now to 5. Remove 1 object and count how many now to 5.

Ρ8

Counting and Understanding Number Joins in rote counting to 12 Joins in rote counting to 15 Rote count to 8 consistently Rote count to 10 consistently Count objects to 8 consistently Count objects to 10 inconsistently Match numerals to 10 Puts out quantities to 10 with some inconsistency Uses the computer to: - Match numerals - Sequence numerals to 8 - Match quantities to 8 Counts objects to 10 on computer screen Begin to recognise numbers to 10 Find some numbers on number line to 10 Write numbers to 5 Uses numbers to 5 to record Estimate objects with a degree of accuracy Attempts to check estimate by counting Sorts numerals from other shapes Ordinal numbers: - first - last - second - third Begin to compare two quantities to 10: - larger

- smaller
- fewer
- more

Knowing and Using Number Facts Uses 1p coins to 10p Uses logic people to indicate own family Record data through pictures-ie sun / rain Recognise links between objects-ie car / garage, leaf / tree Name a set of children-ie those wearing brown shoes Make a simple tally chart Make a pictogram Compare data in pictogram or tally chart Calculating From a given number to 5 find: - number before - number after - one more - one less Add 1 more object and count how many now to 8. Remove 1 object and count how many now to 8. Add 1 more object and count how many now to 10. Remove 1 object and count how many now to 10.

NC1C

Match quantities From a given number to 10 find: Counting and Understanding Number - number before Listens to number stories and rhymes Points to numbers in surroundings - number after Joins in rote counting to 20 - one more Rote counts to 12 consistently - one less Rote counts to 15 consistently Calculating Rote counts to 20 consistently Using objects do addition to 5 Continues rote counting from given point Using objects do addition to 10 Recognises error in counting patterns to 10 Realise that addition means combining two groups Count out objects to 5 Be aware of the terms: Count out objects to 10 - more Count objects in different arrangements - add Realise the last number spoken tells you how many - make there are - sum Realise the count does not change when objects - total rearranged - altogether Recognises numbers to 10 - take away Matches numerals to 20 - leave - how many left Orders numerals to 10 Write numbers to 10 - how many gone Use numbers to 10 to record Using objects to 5 take away given amount Compare two quantities to 10: Using objects to 10 take away given amounts Realise that subtraction means taking objects away - larger - smaller from a group - fewer Use own method of recording results of mathematical operations - more Estimate with a degree of accuracy to 7 Check estimate by counting **Knowing and Using Number Facts** Puts out quantities to 5 Puts out quantities to 10 Draw objects to 5

Draw objects to 10

NC1B

Counting and Understanding Number Joins in counting stories and rhymes Aware of numbers to 100 Counts from 0 to 10 Aware of the number 0 Counts objects to 10 consistently Count objects that cannot be touched Count objects that can be heard Count in ordinal numbers Uses ordinal numbers to 10 Identify the position of an object using ordinal numbers to 5th Identify the position of an object using ordinal numbers to 10th Use last for the final object Realise the relationship between ordinal and cardinal numbers Numbers to 10 read numbers find numbers on number line Write numbers to 10 consistently Orders numerals to 10 consistently Order quantities to 10 consistently identify missing numbers on number line identify the numbers between two given numbers identify which number is more identify which number is less Knowing and Using Number Facts Use counting to compare 2 groups Find one more than..... Find one less than Recognise a small number of objects without counting

Realise if you know how many you don't need to count Calculating Begin to do addition by counting on Know addition means combining two groups Separate sets of up to 10 objects into 2 groups (ie 4,6) Say how many are left when some are taken away Solve subtraction by counting on Understands the phrase 'How many more....?' Use objects to find the difference between two numbers Answer simple addition problems related to life Answer simple subtraction problems related to life Read and write the signs: _ !_! - '='

- '+'

NC1A

Counting and Understanding Number Knows counting and ordering stories and rhymes Join in rote count to 100 Join in rote counting in 10's to 100 Count confidently from 0 to 20 Count backwards from 10 to 0 Count objects to 20 consistently Begin to count on to 10 Count on from a given number to 10 Record number of real objects to 10 Record number of dots to 10 Move forwards and backwards along a number line with confidence Write numbers to 10 on a number line Relate ordinal numbers to cardinal numbers Relate cardinal numbers to date Understand that ordinal numbers denote a position in an order Identify the number after upto 10 Identify the number before upto 10 Know that numbers in the counting sequence are getting bigger **Knowing and Using Number Facts** Use counting on to find a double to 10 Knows an empty set has a value of none or 0 Recognise 1p, 2p, and 5p coins Give equivalent amounts to 5p Begin to give equivalent amounts to 10p Identify numbers in all familiar situations ie clock, telephone, shop Calculating Counts back using number line to 10 to find how many left

Counts back to find how many left using numbers to 10 Counts on using a number line to 10 to find how many have gone Counts on to find how many have gone using numbers to 10 Count on to find how many more are required Identify the operation required to solve a simple problem. Relate addition to combining groups of objects Know several ways how sets to 10 may be separated in to 2 groups Can select two groups of objects to make a given total to 10 Use the terms: - more - add - and - score - make - sum - total - altogether - double - take away - leave - how many left - how many gone

NC2C

Counting and Understanding Number Rote counts to 100 accurately Rote counts in ten's to 100 accurately Counts backwards from 20 Fill in the missing numbers on a number line to 20 Count every other number on a number line Uses a number line to find a sequence ie start at 1 in jumps of 3 Identify the number after upto 20 Identify the number before upto 20 Starts counting at a given number to 20 Counts between two given numbers ie 4 to 15 Places 3 non-sequential numbers up to 20 in order Be aware that numbers 0, 2, 4 etc are called even numbers Be aware that numbers 1,3,5 etc are called odd numbers Compares two given numbers Answer which is more / less questions with numbers to 20 Estimate quantities to 20 Read numbers to 20 Write numbers to 20 Write number words to 20 Find missing numbers to 20 Use the terms: - units / ones - tens - digits Understand that the 1 in 16 = 10 Understand that the 6 in 16 = 6 units Understand that 16 = 10 + 6

Extends a number sequence counting on in twos ie 1, 3, 5..... Extends a number sequence counting back in twos ie 10,8,6.... **Knowing and Using Number Facts** Know some pairs of numbers with totals to 10 Know some pairs of numbers with totals to 5 Rote counts in two's to 20 starting at 0 Rote counts in two's to 20 starting at 1 Recognise 1p, 2p, 5p, 10p coins Give equivalent amounts to 10p Begin to give equivalent amounts to 20p Puts objects into pairs and counts Calculating Understand that the sum does not change no matter what the objects are called Record simple addition sums using + and = signs Accept [] and / as missing numbers Respond quickly to addition to 5 Respond quickly to subtraction to 5 Answer a range of addition questions to 10 Answer a range of subtraction questions to 10 Record simple subtraction sums using - and = signs Create number stories to 10 Investigate simple problems Solve simple problems based on real life stories numbers to 10 Recognise and develop number stories Add 10 to a single digit number Add and subtract single digit to 10 Add and subtract single digit to 20

NC2B

Counting and Understanding Number Rote count to 100 Rote count in tens from 0 to 100 Rote count in tens from 100 to 0 Count in twos to 50 Record a given number up to 50 Write numbers in words up to 50 Identify the number after a given number to 50 Identify the number before up to 50 Starts counting at a given number to 50 Counts between two given numbers ie 19 to 35 Places 4 non-sequential numbers up to 50 in order Find missing numbers in number sequences to 50 Identifies even and odd numbers to 50 Use ordinal numbers appropriately Recognise and write symbols 1/2 and 1/4 Identify halves and guarters of shaded objects Know what each digit in a two digit number represents Use the terms units and tens Groups objects into tens to assist counting Begin to partition numbers ie 27 = 20 + 7Knowing and Using Number Facts Recognise 1p, 2p, 5p, 10p, 20p and 50p coins Give equivalent amounts to 50p Give change from 10p Give change from 20p Double any number to 10 Know doubles with answers to 10 Give the half of even numbers to 10 Give half of any even number to 20 Calculating Recognise that subtraction is the inverse of addition Use inverse relationship Do additions in a different order Know some addition and subtraction stories for numbers up to 10 Add a single digit to a teens numbers up to 20 Subtract a single digit from numbers up to 20 Add three single digits up to 20 Add 10 to a 2 digit number up to 50 Take 10 from a 2 digit number to 50 Recognise patterns - 2+3 = 5, 22 + 3 = 25 Use appropriate operations to solve problems Explain how they solved a problem Explain reasons for method

NC2A

Counting and Understanding Number Count to 100 Count in tens from 0 to 100 Count in tens from 100 to 0 Count in fives to 100 Count in twos to 100 Count in hundreds up to 1000 Read numbers to 100 in figures Read numbers to 100 in words Record a given number up to 100 Write numbers in words to 100 Identify the number after to 100 Identify the number before to 100 Identify the number 10 more than a given number to 100 Identify the number 10 less than a given number to

100

Count from one given number to another up to 100 Places 4 non-sequential numbers up to 100 in order Find missing numbers in number sequences to 100 Estimate the position of any number up to 100 on a number line

Estimate the position of any number up to 100 on a 100 square

Estimate quantities

Begin to round numbers up or down to the nearest 10

Identify the value of each digit in a 2 digit number Identify a number given the number of tens and units

Partitions numbers to simplify a problem Knowing and Using Number Facts Recall addition facts to 10

Recalls subtraction facts to 10 Uses number patterns of similar calculations Recall number doubles from 1 to 15 Recall halves of numbers to 20 Doubling is the inverse of halving Uses knowledge to double larger numbers Understands and uses £ p notation Using coins can total shopping bills Relates x2 table to doubling & halving Knows 2 times tables facts Calculating Record mental + & - sums writing numbers and signs correctly Recognises that addition can be done in any order Can add multiples of 10 Can subtract multiples of 10 Adds single digit to a 2 digit number Take single digit from 2 digit number Understands multiplication as repeat addition Uses a rectangular array for x2 Understands division as sharing equally Understands division as grouping Identifies & uses +, -, x, \div , = signs Understand, use and begin to read count / tally / how many sequence / even / odd predict continue multiple units/ ones/ digits/ tens/ place value equal to more than /greater than / larger than less than /fewer than /smaller than most / least

smallest / largest
order /first / last / before / next /after / between
share / halve/ divide/
double/ times/ multiply
fractions/ half / quarter/ equal parts