## 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

P5 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

Р7

**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.

Р8

**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

Counting and Understanding Number

Listens to number stories and rhymes

Points to numbers in surroundings

Joins in rote counting to 20

Rote counts to 12 consistently

Rote counts to 15 consistently

Rote counts to 20 consistently

Continues rote counting from given point

Recognises error in counting patterns to 10

Count out objects to 5

Count out objects to 10

Count objects in different arrangements

Realise the last number spoken tells you how many

there are

Realise the count does not change when objects

rearranged

Recognises numbers to 10

Matches numerals to 20

Orders numerals to 10

Write numbers to 10

Use numbers to 10 to record

Compare two quantities to 10:

- larger
- smaller
- fewer
- 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

Match quantities

From a given number to 10 find:

- number before
- number after
- one more
- one less

Calculating

Using objects do addition to 5

Using objects do addition to 10

Realise that addition means combining two groups

Be aware of the terms:

- more
- add
- make
- sum
- total
- altogether
- take away
- leave
- how many left
- how many gone

Using objects to 5 take away given amount

Using objects to 10 take away given amounts

Realise that subtraction means taking objects away

from a group

Use own method of recording results of

mathematical operations

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 quarters 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 + 7

**Knowing 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