

## Numeracy

## Our addition, subtraction,

 multiplication and division methodsUsing Objects:


Using Fingers:


Number lines:

$$
3+4=7
$$



Write as number sentence:

$4+3=$

> Place Value:

> (Use of dienes)
$\square \square \square \quad 20+4=$

Counting Tens and Units 1:


Counting Tens and Units 2:


$$
\begin{aligned}
& 20+10=30 \\
& 4+2=6 \\
& 30+6=36
\end{aligned}
$$

## Partitioning with number line:

$$
12+14=10+10+2+4=26
$$



## Compact Vertical Method:

$32+64$

| 3 |
| ---: |
| $+\quad 6$2 <br> 4 |
| 96 |

The extra space between the sum and the answer is deliberate (see next method)

## Compact Vertical Method Crossing Barriers:

Crossing the tens/hundreds/thousands barrier - in this method the extra amount is placed above the answer

$$
136+291
$$



Here the one at the bottom of the hundreds column has been from the hundred when adding 90 and 30

Using a number line to count on:

1 less—using objects if needed

Count back on a number line:

Do visually with objects and then:

$$
=12
$$



59-43

59-43
$7+9=16$

Using a number line to count back:

Cross tens barrier by exchanging:
Compact Vertical Method:
$=31-7$


Counting in 2's, 5's and 10's and
Repeated Addition


So $2+2+2=6 \quad$ And $3 \times 2=6$
All using visual/concrete methods

$4 \times 3=3 \times 4$
$4 \times 3=12$

## Bunny Hop



Mental:
X10
X100
x1000


Grid Method—begin with 2 digits by 1 digit

| $x$ | 20 | 7 |  |
| :---: | :---: | :---: | :---: |
| 50 | 1000 | 350 | 1350 |
| 6 | 120 | 42 | 162 |
|  |  | 1 |  |

1512

$$
6 \div 2=3
$$



Grouping-link to tables
How many 2 s in 6?:


Grouping with remainders
How many 2 s in 7 ?:


1234
Number lines:

$$
25 \div 5=5
$$



Using Tables:

| 91 $\div 7$ |
| :---: |
| $10 \times 7=70$ |
| $3 \times 7=21$ |
| So |
| $13 \times 7=91$ |
| And |
| $91 \div 7=13$ |

Short Division:

To be explained by partitioning when teaching then:
$\qquad$

