

# Addition and Subtraction- two 2 digit numbers

Children could have a go at answering any addition or subtraction questions at home using the following strategies:

These methods are based on partitioning methods, using tens and ones jottings to support.

Adding not crossing tens:

e.g.  $23 + 24 = 47$

| Tens | Ones    |
|------|---------|
|      | ● ● ●   |
|      | ● ● ● ● |
| 40   | 7       |

Partition each number into tens and ones.  
Add the ones  
Add the tens

Examples:

$24 + 52$   
 $32 + 21$   
 $52 + 25$   
 $31 + 44$   
 $57 + 21$

Adding crossing tens:

e.g.  $27 + 26 = 53$

| Tens | Ones            |
|------|-----------------|
|      | ● ● ● ● ● ● ● ● |
|      | ● ● ● ● ● ● ● ● |
| 50   | 3               |


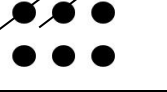
Partition each number into tens and ones.  
Exchange ten ones for one ten  
Add the ones. Add the tens.

Examples:

$24 + 57$   
 $32 + 29$   
 $58 + 25$   
 $39 + 44$   
 $46 + 25$

Subtracting- no exchange:

e.g.  $56 - 22 = 34$

| Tens  | Ones  |
|---|---|
|  |  |
| 30  | 4   |


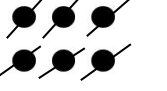
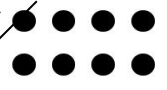
Draw 5 tens and 6 ones. (56)  
Cross out 2 tens and 2 ones (22)

Examples:

$53 - 21$   
 $37 - 16$   
 $58 - 24$   
 $37 - 14$   
 $57 - 25$

Subtracting- with exchange:

e.g.  $56 - 17 = 39$

| Tens   | Ones  |
|--|---|
|  |   |
|  |  |
| 30   | 9   |

Draw 5 tens and 6 ones (56)  
Exchange 1 ten for ten ones.  
Cross out 1 ten and 7 ones (17)

Examples:

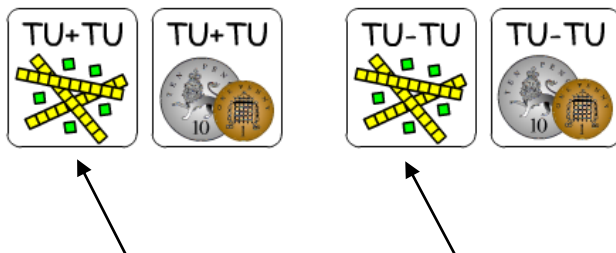
$53 - 26$   
 $37 - 18$   
 $53 - 24$   
 $32 - 14$   
 $51 - 25$

Websites and Apps:

<https://www.topmarks.co.uk/Flash.aspx?f=diennesandcoinsv3>

Click on the TU + TU or TU-TU tens and ones activities when you access the site.

Supporting calculation



# Multiplication and Division

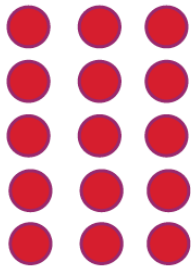
recall and use multiplication and division facts for the 2, 3, 5 and 10 multiplication tables

*Children could have a go at answering any multiplication or division questions at home using the following strategies:*

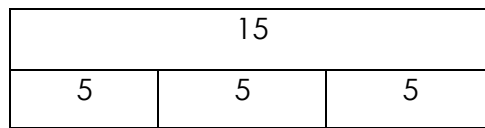
Multiplication and division can be understood using the following representations:

## Arrays

$3 \times 5 =$



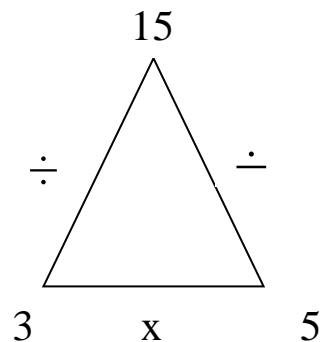
## Bar model (repeated addition)



3 lots of 5

5 lots of 3

## Calculation Triangle



## Fact Families

$3 \times 5 = 15$   
 $5 \times 3 = 15$   
 $15 \div 3 = 5$   
 $15 \div 5 = 3$

## Sharing

15 shared between 3 equally.



## Grouping

15 put into groups of 3.

