

# YR2 ADDITION KNOWLEDGE ORGANISER

## Key Concepts

- Use mental and written methods.
- Recall and use addition facts to 20 and 100.
- Add a 2-digit number & ones; a 2-digit number and tens; and two 2-digit numbers.
- Add three 1-digit numbers.
- Understand that addition calculations can be done in any order.

## Key Vocabulary

- add/addition
- more
- plus
- make
- sum
- altogether
- total
- equals
- calculation
- tens and ones
- number line



## Addition Facts to 20

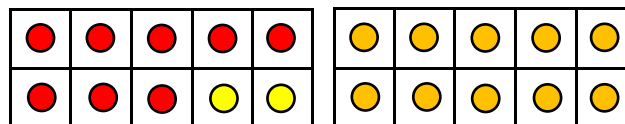
It is important to be able to quickly recall all the ways that each number up to 20 can be partitioned.

These are all the addition facts for the number 18...

$1 + 17 = 18$	$6 + 12 = 18$
$2 + 16 = 18$	$7 + 11 = 18$
$3 + 15 = 18$	$8 + 10 = 18$
$4 + 14 = 18$	$9 + 9 = 18$
$5 + 13 = 18$	

## Adding Three 1-Digit Numbers

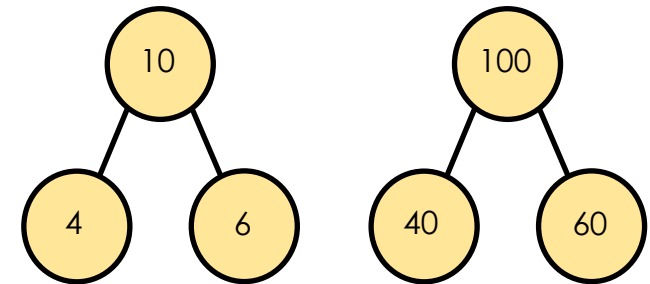
$$8 + 2 + 5 =$$



When adding three 1-digit numbers, try to find the most efficient way of adding them. We can see that  $8 + 2 = 10$  so we add these two numbers first. Then, we can add the 5. The answer is 15.

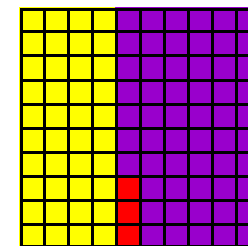
## Addition Facts to 100 Using Tens

Addition facts for the number 10 can be used to help calculate addition facts to 100.



## Addition Facts to 100 with Tens and Ones

A secure knowledge of number bonds to 10 and tens bonds to 100 will help when learning facts to 100 with tens and ones.



Using base 10 to support by placing the tens and ones on top of a 100 block.



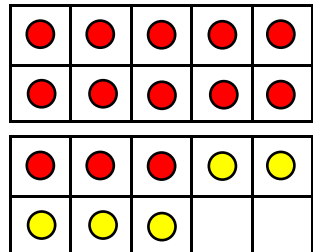
$43 + 57 = 100$ . I know this because  
 $40 + 50 = 90$  and  $3 + 7 = 10$ .  
 $90 + 10 = 100$



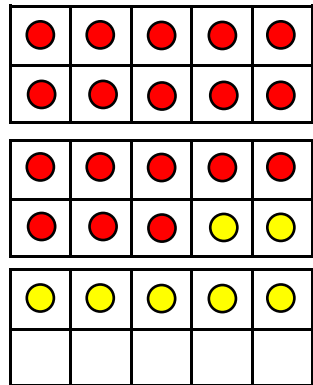
# YR2 ADDITION KNOWLEDGE ORGANISER

## Adding a 2-Digit Number and Ones

Build the 2-digit number using 10s frames and counters. Then, add the 1-digit number using counters of another colour.

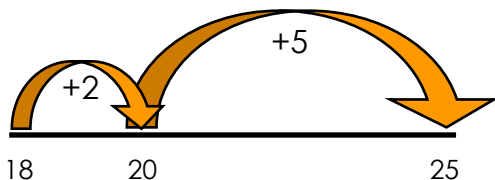


$$13 + 5 = 18$$



$$18 + 7 = 25$$

Partition the 7 into 2 and 5 to reach the next 10s number.

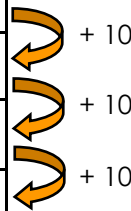


## Adding a 2-Digit Number and Tens

Use place value knowledge to support when adding tens to a number.

$$13 + 30 = 43$$

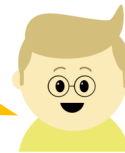
Tens	Ones
1	3
2	3
3	3
4	3



$$26 + 30 = 56$$

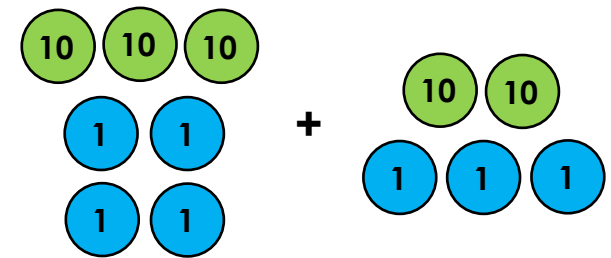
Tens	Ones

I have noticed that the ones column never changes!

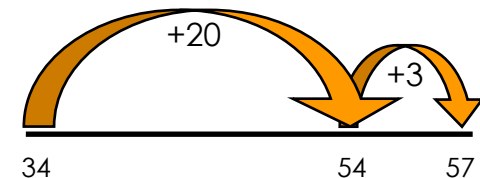


## Adding Two 2-Digit Numbers

$$34 + 23 = 57$$

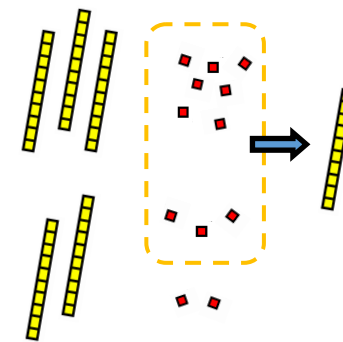


There are 5 tens and 7 ones. The ones are less than 10 so there is no need to exchange.



## How do you cross the 10s boundary?

$$37 + 25 = 62$$



$$30 + 20 = 50$$

$$7 + 5 = 12$$

There are 5 tens = 50

There are 12 ones.

Ten ones can be exchanged for a tens rod to help add the total. Now,  $60 + 2 = 62$ .

