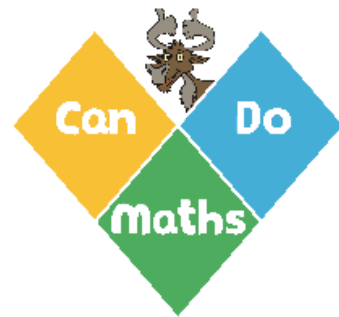
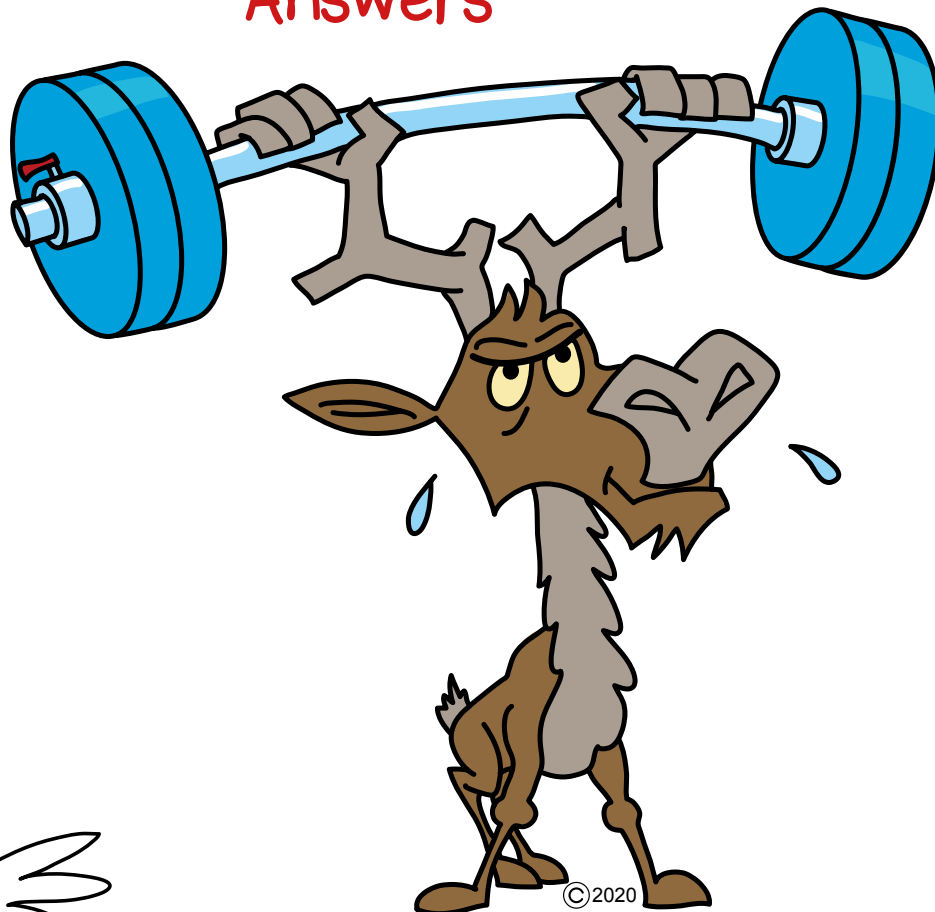




Colin and Coco's Deliberate Practice

Year 2 Unit 3

Addition
Answers





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

	Do It	Challenge It	Play It
Show that addition is commutative	1	1	
Recall and use addition facts of two single digits bridging 10	1		1
Recall and use addition facts of single digit doubles		2	2
Use addition facts of 10 to derive facts of 100	2		
Add ones to 2-digit numbers using number facts where the tens don't change		3	
Add ones to 2-digit numbers using bridging	3		
Add ones to 2-digit numbers by rounding to ten then compensating		4	3
Add multiples of ten to 2-digit numbers using number facts			4
Add two 2-digit numbers by counting on in tens then 1s	4		
Add two 2-digit numbers using partitioning and recombining (No regrouping)	5		
Add two 2-digit numbers using partitioning and recombining	5		
Add two 2-digit numbers by rounding to the nearest ten then compensating		5	5
Add two 2-digit numbers choosing an efficient strategy			6
Add three single digit numbers	6	6	



Do It 1

Calculate:

$4 + 7 = \boxed{11}$

$4 + 9 = \boxed{13}$

$8 + 5 = \boxed{13}$

$7 + 8 = \boxed{15}$

$5 + 6 = \boxed{11}$

$7 + 7 = \boxed{14}$

$9 + 4 = \boxed{13}$

$9 + 6 = \boxed{15}$

$7 + 5 = \boxed{12}$

$6 + 7 = \boxed{13}$

$5 + 9 = \boxed{14}$

$8 + 8 = \boxed{16}$

$8 + 4 = \boxed{12}$

$8 + 6 = \boxed{14}$

$7 + 9 = \boxed{16}$

$6 + 8 = \boxed{14}$

Challenge It 1

Match the calculation to the answer, and the answer to another calculation.
Find the missing buddies.

$7 + 8$	13	$6 + 8$
$5 + 6$	14	$8 + 9$
$8 + 5$	11	$8 + 7$
$9 + 8$	17	$5 + 8$
$5 + 7$	12	$6 + 5$
$7 + 9$	15	$7 + 11$
$8 + 6$	16	$7 + 5$
$11 + 7$	18	$9 + 7$



Bridging Ten Game

Play It 1

You need:

Bridging Ten board (on the next page)

Counters or colours for each player

To play:

Players take it in turns to add two single digit numbers to make a total on the board.

They cover their answer on the board.

Player 1: I am going to add 5 and 7 and cover a 12 on the board.

To win:

The winner is the first player to cover 5 numbers in a line, horizontally, vertically or diagonally.



Bridging Ten Board

14	11	16	12	15	17	13	14
12	15	17	13	16	14	11	18
18	16	11	14	12	15	17	13
15	14	17	12	11	13	12	16
16	12	11	15	13	15	14	11
13	15	16	11	18	12	13	17
16	12	13	15	14	11	16	12
14	11	16	12	17	15	13	18



Calculate:

Do It 2

$4 + 6 = \boxed{10}$	$40 + 60 = \boxed{100}$	$8 + 2 = \boxed{10}$	$80 + 20 = \boxed{100}$
$5 + \boxed{5} = 10$	$50 + \boxed{50} = 100$	$3 + \boxed{7} = 10$	$30 + \boxed{70} = 100$
$7 + \boxed{3} = 10$	$70 + \boxed{30} = 100$	$9 + \boxed{1} = 10$	$90 + \boxed{10} = 100$
$2 + \boxed{8} = 10$	$20 + \boxed{80} = 100$	$6 + \boxed{4} = 10$	$60 + \boxed{40} = 100$
$\boxed{1} + 9 = 10$	$\boxed{10} + 90 = 100$	$\boxed{2} + 8 = 10$	$\boxed{20} + 80 = 100$

Challenge It 2

Match the double or near double calculation to the answer.
Fill in the missing numbers.

7 + 7	12
8 + 7	11
4 + 5	14
6 + 5	18
9 + 9	15
6 + 6	16
8 + 8	9
6 + 7	17
8 + 9	13



Doubles and Near Doubles Game

Play It 2

You need:

Bridging Ten board (two pages back)

Counters or colours for each player

To play:

Players take it in turns to add two single digit numbers, either a double or a near double, to make a total on the board. (Their single digits must either be two the same, or numbers next to each other.)

They cover their answer on the board.

Player 1: I am going to add 6 and 7 and cover a 13 on the board.

To win:

The winner is the first player to cover 5 numbers in a line, horizontally, vertically or diagonally.



Do It 3

Calculate:

$$4 + 17 = \boxed{21}$$

$$4 + 29 = \boxed{33}$$

$$38 + 5 = \boxed{43}$$

$$7 + 48 = \boxed{55}$$

$$5 + 16 = \boxed{21}$$

$$27 + 7 = \boxed{34}$$

$$39 + 4 = \boxed{43}$$

$$49 + 6 = \boxed{55}$$

$$17 + 5 = \boxed{22}$$

$$6 + 27 = \boxed{33}$$

$$5 + 39 = \boxed{44}$$

$$8 + 48 = \boxed{56}$$

$$18 + 4 = \boxed{22}$$

$$28 + 6 = \boxed{34}$$

$$7 + 39 = \boxed{46}$$

$$46 + 7 = \boxed{53}$$

Challenge It 3

Make the statement true in several different ways.

$$2 \boxed{} + \boxed{} = 29$$

for example

$$21 + 8 = 29$$

$$22 + 7 = 29$$

Make the statement true in several different ways.

$$5 \boxed{} + \boxed{} = 59$$

for example

$$51 + 8 = 59$$

$$52 + 7 = 59$$



Add 9 by Adding 10 Game

Play It 3

You need:

100 grid as a game board

0 - 9 dice

To play:

Take it in turns to throw the dice twice, to make a two-digit number.

Choose which digit represents the tens and which represents the ones.

Add 9 to your number by adding ten then subtracting one.

Cover the answer on the 100 board.

For example:

Player 1: I have thrown a 3 and a 7

If I have 3 tens and 7 ones the number is thirty-seven.

$37 + 10 = 47$ so $37 + 9 = 46$

To win:

The winner is the first player to cover 4 numbers in a line, horizontally, vertically or diagonally.



Do It 4

Calculate:

$38 + 14 = \boxed{52}$

$48 + 23 = \boxed{71}$

$38 + 13 = \boxed{51}$

$47 + 15 = \boxed{62}$

$57 + 15 = \boxed{72}$

$56 + 15 = \boxed{71}$

$47 + 15 = \boxed{62}$

$48 + 26 = \boxed{74}$

$47 + 14 = \boxed{61}$

$68 + 23 = \boxed{91}$

$58 + 34 = \boxed{92}$

$58 + 23 = \boxed{81}$

$37 + 15 = \boxed{52}$

$58 + 13 = \boxed{71}$

$77 + 14 = \boxed{91}$

$38 + 24 = \boxed{62}$

Challenge It 4

Choose from the digits 4, 5 and 6 in any combination to make the statement true in as many ways as you can.

$\boxed{}\boxed{} + 9 = \boxed{}\boxed{}$

for example:
 $55 + 9 = 64$

How many more calculations can you make if you can use the digit 7 as well?



Multiples of Ten Game

Play It 4

You need:

100 grid as a game board

0 - 9 dice

To play:

Take it in turns to throw the dice twice, to make a two-digit number.

Choose which digit represents the tens and which represents the ones.

Add a multiple of ten to your number.

Cover the answer on the 100 board.

For example:

Player 1: I have thrown a 3 and a 7

If I have 3 tens and 7 ones the number is thirty-seven.

I choose to add 40, so will cover 77 on the board.

To win:

The winner is the first player to cover 4 numbers in a line, horizontally, vertically or diagonally.



Do It 5

Calculate:

$33 + 14 = \boxed{47}$

$48 + 21 = \boxed{69}$

$38 + 23 = \boxed{61}$

$47 + 35 = \boxed{82}$

$54 + 15 = \boxed{69}$

$27 + 42 = \boxed{69}$

$47 + 25 = \boxed{72}$

$28 + 56 = \boxed{84}$

$42 + 14 = \boxed{56}$

$62 + 23 = \boxed{85}$

$56 + 34 = \boxed{90}$

$58 + 35 = \boxed{93}$

$34 + 15 = \boxed{49}$

$54 + 13 = \boxed{67}$

$47 + 24 = \boxed{71}$

$38 + 48 = \boxed{86}$

Match the calculation to the answer.
Fill in the missing buddies.

Challenge It 5

27 + 19	57
38 + 29	55
49 + 19	46
36 + 19	66
37 + 29	67
28 + 29	56
37 + 19	68
28 + 19	65
26 + 39	47



Add 19 by Adding 20 Game

Play It 5

You need:

100 grid as a game board

0 - 9 dice

To play:

Take it in turns to throw the dice twice, to make a two-digit number.

Choose which digit represents the tens and which represents the ones.

Add 19 to your number by adding twenty then subtracting one.

Cover the answer on the 100 board.

For example:

Player 1: I have thrown a 3 and a 7

If I have 3 tens and 7 ones the number is thirty-seven.

$37 + 20 = 57$ so $37 + 19 = 56$

To win:

The winner is the first player to cover 4 numbers in a line horizontally, vertically or diagonally.



Do It 6

Calculate:

$$4 + 6 + 7 = \boxed{17}$$

$$4 + 8 + 6 = \boxed{18}$$

$$4 + 5 + 6 = \boxed{15}$$

$$5 + 5 + 6 = \boxed{16}$$

$$5 + 7 + 5 = \boxed{17}$$

$$7 + 5 + 6 = \boxed{18}$$

$$7 + 3 + 5 = \boxed{15}$$

$$7 + 7 + 3 = \boxed{17}$$

$$7 + 8 + 9 = \boxed{24}$$

$$8 + 2 + 4 = \boxed{14}$$

$$8 + 8 + 2 = \boxed{18}$$

$$8 + 6 + 7 = \boxed{21}$$

$$6 + 4 + 6 = \boxed{16}$$

$$6 + 9 + 1 = \boxed{16}$$

$$6 + 9 + 7 = \boxed{22}$$

Challenge It 6

Adding three single digit numbers, how many different ways can you make the total 15?

$$\boxed{} + \boxed{} + \boxed{} = 15$$

Adding three single digit numbers, how many different ways can you make the total 25?

$$\boxed{} + \boxed{} + \boxed{} = 25$$



Efficient Adding Game

Play It 6

You need:

100 grid as a game board

0 - 9 dice

To play:

Take it in turns to throw the dice twice, to make a two-digit number.

Choose which digit represents the tens and which represents the ones.

Throw the dice to make another two-digit number

Add your numbers together, convincing your opponent that you are choosing to use an efficient method. You may use jottings to explain your thinking.

Cover the answer on the 100 board.

For example:

Player 1: I have made the numbers 34 and 29

I will add them by starting with 34, adding 30 then subtracting 1

I cover 63

To win:

The winner is the first player to cover 4 numbers in a line horizontally, vertically or diagonally.