



Colin and Coco's Deliberate Practice

Year 3 Unit 4

Addition and Subtraction
Mental Methods





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
Add ones to three-digit numbers using number facts where the tens don't change	1	1	1
Add ones to three-digit numbers using bridging	1	1	1
Add ones to three-digit numbers by rounding to ten then compensating	1		1
Add tens to three-digit numbers using number facts, where the hundreds don't change	2		2
Add tens to three-digit numbers using bridging	2		2
Add hundreds to three-digit numbers using number facts	2		2
Add 99 to three-digit numbers using rounding to the nearest hundred and then compensating		2	
Add two 3-digit numbers using rounding to the nearest hundred and then compensating	3		3
Add two 3 digit numbers by partitioning and recombining (no regrouping)	3		
Add two 2-digit numbers where the sum exceeds 100, choosing an efficient mental strategy		3	



Calculate:

Do It 1

$214 + 3 =$		$245 + 8 =$		$204 + 9 =$	
$214 + 5 =$		$237 + 4 =$		$237 + 9 =$	
$241 + 6 =$		$317 + 5 =$		$345 + 9 =$	
$421 + 7 =$		$536 + 6 =$		$527 + 9 =$	

Challenge It 1

Match the calculation to the answer.
Find the missing buddies.

457 + 4	452
475 + 4	440
447 + 5	431
	479
432 + 8	488
483 + 5	433
458 + 8	
423 + 8	443
428 + 5	466



Add Ones Game

Play It 1

You need:

0 - 9 dice

To play:

Take it in turns to roll the dice to make a three-digit number and a one-digit number. Add the numbers together.

The player with the largest total scores a point.

To win:

The winner is the first player to score 10 points.

Play again scoring a point for the smallest total.

			+	
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Calculate:

Do It 2

$215 + 30 =$		$385 + 40 =$		$504 + 300 =$	
$241 + 50 =$		$467 + 50 =$		$236 + 700 =$	
$523 + 60 =$		$652 + 80 =$		$107 + 800 =$	
$601 + 70 =$		$732 + 70 =$		$487 + 500 =$	

Put digits in the empty boxes to make the calculations correct.

Challenge It 2

Complete each one in several different ways.

$$\begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} 6 + 99 = \begin{array}{|c|c|c|} \hline \square & \square & \square \\ \hline \end{array}$$
$$\begin{array}{|c|c|c|} \hline \square & \square & \square \\ \hline \end{array} + 99 = \begin{array}{|c|c|} \hline \square & 1 \\ \hline \end{array} \begin{array}{|c|} \hline \square \\ \hline \end{array}$$

Now complete both statements using the digits 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each and using one of the digits twice.



Add Tens and Hundreds Game

Play It 2

You need:

0 - 9 cards

To play:

Pick Game Template 1 or 2

Shuffle the cards and place them face down.

Take turns to turn over a card and place the digit in the Game Template.

Once a digit is placed it cannot be moved.

Both players now find the answer to their calculation using an efficient strategy.

The player who calculates the largest total scores a point.

To win:

The winner is the first player to score 10 points.

Play again scoring points for the lowest total.

Game 1

			+		0
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Game 2

			+		0	0
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Do It 3

Use an efficient mental strategy and jottings to calculate:

$215 + 199 = \boxed{} \quad 325 + 143 = \boxed{} \quad 299 + 317 = \boxed{}$

$241 + 399 = \boxed{} \quad 413 + 205 = \boxed{} \quad 506 + 102 = \boxed{}$

$499 + 265 = \boxed{} \quad 612 + 280 = \boxed{} \quad 499 + 302 = \boxed{}$

$299 + 399 = \boxed{} \quad 752 + 246 = \boxed{} \quad 698 + 199 = \boxed{}$

Match the calculation to the answer.
Find the missing buddies.

Challenge It 3

$40 + 62$		104
$35 + 99$		124
$70 + 34$		105
		110
$45 + 60$		123
$35 + 73$		102
$86 + 24$		
$99 + 24$		134
$65 + 70$		108



Addition is Mental Game

Play It 3

You need:

1 - 6 dice

To play:

Take it in turns to roll the dice to make a 3-digit number.

Both players now add 199 to their number using an efficient strategy.

The player who calculates the largest answer scores a point.

To win:

The winner is the first player to score 10 points.

Play again adding 190