Colin and Coco's Deliberate Practice

Year 5 Unit 4

Addition and Subtraction

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 mangeable steps.

	Do It	Challenge It	Play It
Add two whole numbers choosing an efficient mental strategy		1	
Subtract two whole numbers choosing an efficient mental strategy		1	
Use column addition for two numbers with more than 4 digits when regrouping is required in multiple columns	1		1
Use column subtraction for two numbers with more than 4 digits when exchanging is required in multiple columns	1		1
Use column addition for numbers with 3 decimal places when regrouping is required	2		2
Use column addition for numbers with 1,2 or 3 decimal places when regrouping is required	2	2	2
Use column subtraction for numbers with 3 decimal places when exchanging is required	3		3
Use column subtraction for numbers with 1,2 or 3 decimal places when exchanging is required	3	3	3
Add two decimal numbers choosing an efficient strategy	4	4	4
Subtract two decimal numbers choosing an efficient strategy	4	4	4

Do It 1

Calculate:

	5	7	2	8	4
+	2	3	4	3	5

	6	4	0	3	7
+		5	7	8	5

	6	4	0	3	7
−	3	5	7	8	5

	8	0	4	2	1
−		6	7	8	5

	6	8	7	5	9
+	3	5	4	3	5

	9	6	5	9	7
+		7	8	0	4

	8	0	7	4	1
−	4	2	7	8	5

	5	4	2	0	3
−		8	6	5	7

247,764 + 8,438 =

247,764 − 8,438 =

Challenge It 1

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

35,331 - 9,999
40,002 + 33,000
40,003 + 9,999
68,032 − 19,000
85,002 - 25,000
74,532 − 14,500
8,501 + 65,031
19,999 + 20,003

73,002
60,032
60,002
73,532
49,032
40,002
99,332
50,002

Adding & Subtracting Game

Play It 1

You need:
0 - 9 Dice
Adding and Subtracting Game templates (see below for Game 1 or Game 2)

To play:
Pick Game Template 1 or 2
Take turns to roll the dice.
Each player places their digits to generate two 5-digit numbers. Once a digit is placed it cannot be moved.
Both players now find the answer to their calculation.
The player who calculates the highest total or largest difference wins a point.

To win:
The first player to get 10 points wins the Game.

Play again scoring for the smallest total or difference.

Game 1

+					

Game 2

−					

Do It 2

Calculate:

5·7 2 8 + 2·3 4 3	6·3 9 5 + 0·8 4 3	6·5 0 7 + 4·5 7 4	9·9 8 3 + 0·7 5 9
4·0 2 8 + 2·3 9	9·6 4 3 + 0·8 7	5·7 4 3 + 3·7	9·6 7 7 + 0·8 3

2.45 + 3.777 =

2.675 − 1.78 =

Challenge It 2

Put digits in the empty boxes to make the calculations correct.
Complete them in several different ways, where possible.

$$\begin{array}{r} 1.\square\square 3 \\ +\square.9\square 6 \\ \hline 3.40\square \\ \hline \end{array}$$

$$\begin{array}{r} 1.2\square 6 \\ +0.\square 8 \\ \hline 1.\square\square\square \\ \hline \end{array}$$

Complete both calculations together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.

Adding Decimals Game

Play It 2

You need:
0 - 9 Dice
Adding Game templates (see below for Game 1, Game 2 or Game 3)

To play:
Pick Game Template 1, 2 or 3
Take turns to roll the dice.
Each player places their digits to generate two decimal numbers. Once a digit is placed it cannot be moved.

Both players now find the answer to their calculation.
The player who calculates the highest total wins a point.

To win:
The first player to get 10 points wins the Game.

Play again scoring for the smallest total.

Game 1

□.□□□ + □.□□□

Game 2

□.□□□ + □.□□

Game 3

□.□□ + □.□

Do It 3

Calculate:

5·2 1 8 − 2·3 4 3	6·1 9 3 − 0·8 4 5	6·3 0 5 − 5·5 7 4	9·9 0 3 − 0·8 5 9
4·0 2 8 − 2·3 9	9·6 4 3 − 0·8 7	5·6 4 3 − 3·8	9·1 0 6 − 0·7

4.075 − 2.18 =

5.425 − 3.55 =

Challenge It 3

Put digits in the empty boxes to make the calculations correct.
Complete them in several different ways, where possible.

$$\square.\square\ 2\ 9 - \square.9\ \square\ \square = 0.3\ 4\ \square$$

$$2.\square\ \square\ 7 - 0.\square\ 2 = 1.6\ 8\ \square$$

Complete both calculations together using the digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 once each.

Subtracting Decimals Game

Play It 3

You need:
0 - 9 Dice
Subtracting Game templates (see below for Game 1, Game 2 or Game 3)

To play:
Pick Game Template 1, 2 or 3
Take turns to roll the dice.
Each player places their digits to generate two decimal numbers. Once a digit is placed it cannot be moved.
Both players now find the answer to their calculation.
The player who calculates the lowest difference wins a point.

To win:
The first player to get 10 points wins the Game.

Play again scoring for the largest difference.

Game 1

□.□□□ − □.□□□

Game 2

□.□□□ − □.□□

Game 3

□.□□□ − □.□

Do It 4

Calculate using an efficient strategy:

1.583 + 0.67 = ☐	1.583 + 0.9 = ☐	1.583 + 1.999 = ☐
2.9 + 1.673 = ☐	2.9 + 1.073 = ☐	2.999 + 1.673 = ☐
1.675 – 0.471 = ☐	1.675 – 0.9 = ☐	4.075 – 3.999 = ☐
3.452 – 0.9 = ☐	3.452 – 3.449 = ☐	3.002 – 2.998 = ☐

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

Challenge It 4

		3.867
3.967 - 1.5		5.367
2.567 + 1.3		1.367
4.587 – 1.02		5.267
0.99 + 1.577		2.567
5 - 3.633		2.267
1.067 + 4.3		2.367
7 – 1.733		
3.257 – 0.99		3.567

Adding & Subtracting Decimals Game

Play It 4

You need:
0 - 9 Dice

To play:
Take turns to roll the dice three times to get three digits and complete the decimal:

0. ☐☐☐

Each player adds 0.09 to their number.
The player with the highest total scores one point.

To win:
The first player to get 10 points wins the Game.

Play again but subtract 0.09
The player with the lowest answer scores one point.