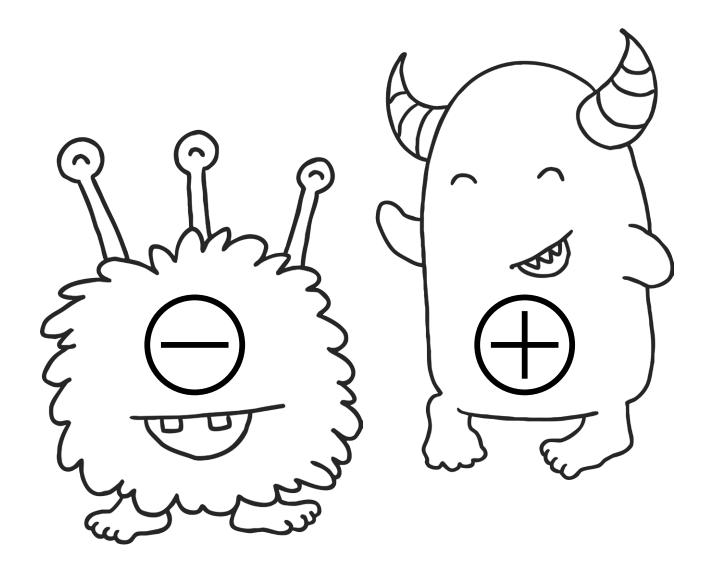
# Maths Addition and Subtraction Workbook







# Home Learning Maths Workbook Pack

## Year 3 Programme of Study – Addition and Subtraction

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# **Adding Ones to a 3 Digit Number**



LO: to add ones to a 3 digit number

Calculate the answer to the following:

1) 
$$136 + 3 =$$

$$2)$$
 212 + 4 =

3) 
$$381 + 6 =$$

4) 
$$494 + 5 =$$

6) 
$$620 + 7 =$$

8) 
$$952 + 7 =$$

Calculate the answer to the following:

10) 
$$224 + 7 =$$

11) 
$$388 + 6 =$$

12) 
$$478 + 5 =$$

Calculate the answer to the following:

**23)** 
$$765 + 3 =$$

# **Challenge**

Explain how you would use 7 + 8 = 15 to calculate 537 + 8.



# **Subtracting Ones from a 3 Digit Number**



LO: to subtract ones from a 3 digit number

Calculate the answer to the following:

$$3)$$
 307 - 5 =

4) 
$$489 - 7 =$$

8) 
$$959 - 8 =$$

Calculate the answer to the following:

Calculate the answer to the following:

# **Challenge**

Explain how you would use 14 - 8 = 6 to calculate 384 - 8.



# **Adding Tens to a 3 Digit Number**



LO: to add tens to a 3 digit number

Calculate the answer to the following:

1) 
$$153 + 30 =$$

$$2)$$
 272 + 20 =

$$3) 301 + 60 =$$

4) 
$$413 + 70 =$$

5) 
$$523 + 40 =$$

6) 
$$630 + 20 =$$

8) 
$$939 + 60 =$$

Calculate the answer to the following:

9) 
$$142 + 80 =$$

10) 
$$267 + 70 =$$

11) 
$$398 + 60 =$$

13) 
$$564 + 80 =$$

14) 
$$675 + 90 =$$

16) 
$$964 + 60 =$$

Calculate the answer to the following:

# **Challenge**

Explain how you would use 8 + 6 = 14 to calculate 783 + 60.



# **Subtracting Tens from a 3 Digit Number**



LO: to subtract tens from a 3 digit number

Calculate the answer to the following:

6) 
$$625 - 20 =$$

8) 
$$992 - 80 =$$

Calculate the answer to the following:

Calculate the answer to the following:

# Challenge

Explain what other calculations you might use 13 - 8 = 5 to calculate the answer.



# **Adding Hundreds to a 3 Digit Number**



LO: to add hundreds to a 3 digit number

Calculate the answer to the following:

$$3)$$
 582 + 400 =

4) 
$$273 + 300 =$$

$$5)$$
  $561 + 200 =$ 

6) 
$$170 + 700 =$$

$$7)$$
 207 + 500 =

Calculate the answer to the following:

9) 
$$372 + 800 =$$

10) 
$$460 + 700 =$$

11) 
$$508 + 900 =$$

13) 
$$549 + 800 =$$

16) 
$$927 + 600 =$$

Calculate the answer to the following:

# **Challenge**

Explain how you would use 9 + 4 = 13 to calculate 931 + 400.

## **Subtracting Hundreds from a 3 Digit Number**



LO: to subtract hundreds from a 3 digit number

Calculate the answer to the following:

Calculate the answer to the following:

# **Challenge**

Take any 3 digit number. You can subtract 100, 200, 300 or 400 once each, but you must not go below 0.

Can you always get to a number between or equal to 100 and 1? If you use as many subtractions as possible, are there any patterns?







# **Adding 3 and 2 Digit Numbers - No Carrying**



LO: to use column addition

Calculate the answer to the following:

1. 534 + 45	2. 213 + 62	3. + 304 + 84 	4. 672 + 16 ——
<sup>5.</sup> 130 + 56	6. + 802 + 92	<sup>7.</sup> 529 + 50	8. <u>281</u> + <u>17</u>
9. + 36 ——	10. + 72 ——	11. + 21 ——	12. + 327 + 51
13. + 474 + 15	14. + 44 ——	15. + 22 ——	





# **Adding 3 and 2 Digit Numbers - With Carrying**



LO: to use column addition

Calculate the answer to the following:

673 + 18 ——	457 + 25	+ 304 + 69 ——	+ 615 + 38 ——
149	+ 805	+ 672	581
+ 16	+ 85	+ 42	+ 67
+ 36	+ 670	662	387
——	+ 72	+ 75	+ 51
476 + 45	158 + 74	+ 379 + 26 ——	





## Subtracting 2 Digit Numbers from 3 Digit Numbers No Exchanging



LO: to use column subtraction

Calculate the answer to the following:

479	337	584	478
- 18	- 25	- 61	- 38
_ 748	_ 563	652	569
_ 16	_ 12	- 32	- 67
_ 298	677	697	387
_ 36	- 72	- 75	- 51
_ 486 _ 45 	_ 188 _ 74 	_ 379 	

3_7	54_	8_8
- 5_	- <u>_2</u>	- 6_
302	515	833



## Subtracting 2 Digit Numbers from 3 Digit Numbers With Exchanging



LO: to use column subtraction

Calculate the answer to the following:

343	_ 641	472	_ 473
18	25	- 67	_ 38
_ 620	_ 364	_ 415	_ 528
16	46	_ 33	_ 67
_ 126	_ 673	_ 607	_ 916
31	_ 82	_ 64	_ 53



# **Adding Two 3 Digit Numbers - No Carrying**



LO: to use column addition

Calculate the answer to the following:

273 + <sub>514</sub>	451 + 225 ——	+ 304 + 463	615 + 172 ——
153 + <sub>716</sub>	+ 805 + 102 	+ 572 + 213	531 + <sub>267</sub>
+236 ——	370 + 116 ——	+ 622 + 375 —	+312 +251
+ 476 + 403	155 + <sub>234</sub>	371 + <sub>628</sub>	





# **Adding Two 3 Digit Numbers - With Carrying**



LO: to use column addition

Calculate the answer to the following:

+323 +518 ——	+ 607 + 228 —	+ 507 + 463 ——	319 + <sub>142</sub>
+ 706 ———	+ 505 + 109 ——	+ 672 + 243	591 + <sub>367</sub>
+ 572 + 336 ———	760 + 615 ——	+ 822 + 345	912 + <sub>461</sub>
476 + <sub>485</sub>	655 + <sub>738</sub>	379 + 648	





## Subtracting 3 Digit Numbers from 3 Digit Numbers No Exchanging



LO: to use column subtraction

Calculate the answer to the following:

569	346	774	652
- 315	- 125	- 453	- 420
_ 628	_ 573	_ 832	_ 599
305	_ 512	232	_ 467
298	687	988	768
136	- 471	- 575	- 251
_ 555	_ 596	_ 368	
_ 345	_ 374	220	





# Subtracting 3 Digit Numbers from 3 Digit Numbers With Exchanging



LO: to use column subtraction

Calculate the answer to the following:

451	840	472	_ 481
- 218	- 525	- 238	323
_ 690	_ 726	- 427	_ 519
_ 526	_ 419	- 233	_ 450
_ 353	_ 627	_ 622	- 951
136	_ 258	_ 394	- 652





## **Checking 2 by 2 Digit Mixed Calculations - With Carrying and Exchanging**

LO: to check by using inverse

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

1	76 + 45 =	2	97 - 38 =	

Challenge: explain how you might check your answer to this calculation.

$$47 + 54 + 35 =$$

## **Checking 3 by 2 Digit Mixed Calculations - With Carrying and Exchanging**

LO: to check by using inverse

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

1	419 + 79 =	2 608 - 57 =
3	437 - 49 =	<b>4</b> 372 + 88 =
5	673 - 46 =	514 + 49 =
7	586 + 97 =	8 970 - 74 =

**Challenge:** use 2 different methods to calculate and check this calculation. Can you explain which method you find better?

$$365 - 87 =$$





## **Checking 3 by 3 Digit Mixed Calculations - With Carrying and Exchanging**

LO: to check by using inverse

Calculate the answer to the following calculations and check by using the inverse (addition or subtraction). Choose the best method for you - column method, number line, near doubles etc.

1	245 + 356 =	2 562 - 347 =
3	703 - 459 =	4 509 + 389 =
5	825 - 286 =	6 672 + 319 =
7	592 + 209 =	8 913 - 387 =

**Challenge**: explain how you might use the inverse to check this calculation.





## **Creating Addition and Subtraction Calculations**

LO: to understand addition is the inverse of subtraction

Create 2 addition and 2 subtraction calculations from each set of 3 numbers

1 34	23 5	7 2	16	59	75	3	92	45 13	7
+	=_		_+_	=			_+_	=_	
+	=		+	=			+	=	
									_
		- -		·					
				<u> </u>					_
4 87	240 15	<b>3 5</b>	393	240	153	6	616	547 110	63
+	=_	_ _	_+_	=			_+_	=_	
+	=		+	=			+	=	
		- -							_
		_							

Create 2 addition and 2 subtraction calculations from each set of 3 numbers, writing the full calculations in the given box.

1	26	97	123	2	86	134	48	3	364	213	151
4	652	589	63	5	572	801	229	6	371	912	1283





# **Estimating Answers**

To answer the following questions decide which multiple of 10 each number is closest to and then add or subtract the numbers. Trying to answer quickly will help you to practise estimating rather than working the answer out.

## Example

My estimate: 30 + 60 = 90

## Estimating Addition:

#### 1.32 + 59 =

#### 2.23 + 28 =

#### 3.51 + 53 =

My estimate: + = =

#### 4.81 + 33 =

My estimate: + = =

#### 5.89 + 27 =

My estimate: + = 0.00

#### 6.59 + 92 =

My estimate: + = = =

#### 7.132 + 19 =

#### 8. 88 + 109 =

My estimate: = = =

#### 9.127 + 152 =

#### 10. 353 + 281 =

My estimate: = = =



## **Estimating Subtraction:**

#### 1.58 - 32 =

		_	~	
My estimate:	_	= {		4
J		2201		کر

#### 2. 79 - 22 =



### 3. 104 - 51 =

My estimate:	_	= {	}
		,,0	كرمو

### 4. 121 - 33 =

My estimate:	 -	= {	
		To	محر



#### 6. 229 - 92 =



## 7. 132 - 17 =



## 8. 288 - 109 =



#### 9. 257 - 152 =



#### 10. 353 - 281 =

My estimate: =

# **Exemplary Calculation Procedure**

Estimating, Answering and Checking with Inverse Operation

- 1. Begin by estimating your answer using the nearest multiple of 10 for each number.
- **2.** Perform the exact calculation using your chosen method.
- **3.** Check that your answer is close to your estimate.
- **4.** Check your answer is correct by working backwards using the inverse operation.

#### Addition Calculations:

Example:

Number Sentence	My Estimate			Answer close to estimate	Check with Inverse		Correct?				
e.g. 57 + 39	60 + 40 = 100	+	5 3 9	7 9 6		96/100 = Yes!		8 9 3 5	6 9 7		Yes!

Number Sentence	My Estimate	Calculation		Answer close to estimate	Check with Inverse		Correct?	
1. 39 + 23								
<b>2.</b> 18 + 54								
<b>3.</b> 67 + 54								
<b>4.</b> 126 + 43								



<b>5.</b> 218 + 133						

## **Subtraction Calculations:**

Example:

Number Sentence	My Estimate	Calculation	Answer close to estimate	Check with Inverse		Correct?
e.g. 84 - 29	80 - 30 = 50	7 8 4 - 2 9 5 5	50/55 = <b>Yes!</b>	5 + 2 8	5 9 4	Yes!

Number Sentence	My Estimate	Calculation		Answer close to estimate	Check with Inverse		Correct?
1. 59 - 22							
<b>2.</b> 97 - 18							
<b>3.</b> 126 - 32							
<b>4.</b> 188 - 52							
<b>5.</b> 352 - 169							







# **Addition and Subtraction Word Problems**



LO: to solve word problems using addition and subtraction

Solve the following problems:

- 1) There are 167 books in one classroom and 392 books in the other. How many books are there altogether in both classrooms?
- 2) Jay has a collection of 263 football cards. His brother has 189. How many more football cards does Jay have?
- 3) A family drive 208 miles from London to Manchester, and then 213 miles on to Glasgow.
  How far did they travel altogether?
- 4) A cricket team score 456 in the first innings and 249 in the second innings. How many runs did they score altogether?
- 5) Jenny has £5.67. She spends £2.85 on a present for her brother. How much money does she have left?
- 6) Abi collects stamps. She has 351 in a box and 456 in a book. How many does she have altogether?
- 7) A lorry driver has a 561 mile journey. He stops for a break after 314 miles. How much further has he to travel?
- 8) A pack of Christmas cards costs £5.49. How much change would there be from £10.00?
- **9)** A packet of lentils weighs 450g and a packet of kidney beans weighs 385g. How much do they both weigh altogether?
- 10) A shopkeeper has 367 bottles of lemonade. He orders 480 more. How many bottles of lemonade will he have now?

## **Challenge**

Two children have 720 marbles between them. Jay has 126 more than Abi. How many does Abi have?







## **Addition and Subtraction Using Worded Calculations**



LO: to solve word problems using addition and subtraction

Solve the following problems:

- 1) What number is thirty five more than two hundred and fifty nine?
- 2) What number is 451 subtract 246?
- 3) How much larger is 817 than 662?
- 4) What number is three hundred and six more than four hundred and nineteen?
- 5) What number is the difference between two hundred and sixteen and three hundred and nine?
- 6) Add five hundred and ninety three and three hundred and sixty eight.
- 7) What number is four hundred and sixty five less than seven hundred and twelve?
- **8)** Increase £5.73 by £6.45.
- 9) What number is the sum of six hundred and forty and five hundred and seventy six?
- **10)** Decrease 790 by 213.
- 11) Add together £2.58, £6.27 and £7.03.
- 12) What number is two hundred and fourteen minus one hundred and seventeen?
- 13) Take £271 away from £604.
- 14) If I increase a number by 382 and get 901, what number did I start with?
- 15) Add together 219 and 734, then subtract 486.

## Challenge

Use the digits 1 to 9 to make three numbers that add up to 900.



