

# Year 3 and Year 4 Addition and Subtraction, Unit 1 (34750)

## Additional teacher instructions for practice sheets

These notes indicate which practice sheets are most appropriate for which groups.

### Day 1 Y3 Adding two 3-digit numbers Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE practise using expanded addition.

Working at ARE aim to complete Q1-12.

Greater Depth start at Q7 and use compact addition only.

### Day 1 Y4 Column addition Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Children complete as many additions as they can. Warn them to watch out as there are one or two that they should work out mentally!

Working towards ARE start at Q1 and use expanded column addition.

Working at ARE start at Q5 and use compact column addition.

Greater Depth start at Q9 and use compact column addition.

### Day 2 Y3 Adding numbers to reach a target Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE may use expanded addition.

Working at ARE use compact addition.

Greater Depth use compact addition and attempt the Challenge.

### Day 2 Y4 Subtracting 3-digit numbers Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE choose expanded or compact subtraction.

Others use compact column subtraction.

### Day 3 Y3 More 3-digit addition Sheet 1

Working towards ARE

### Day 3 Y3 More 3-digit addition Sheet 2

Working at ARE / Greater Depth

### Day 3 Y4 Column subtraction of 3-digit numbers Sheet 3

Working towards ARE

### Day 3 Y4 Column subtraction of 4-digit numbers Sheet 4

Working at ARE / Greater Depth

Working at ARE try using compact column subtraction or use expanded column subtraction.

Greater Depth use compact column subtraction.

# Year 3 and Year 4 Addition and Subtraction, Unit 1 (34750)

## Additional teacher instructions for practice sheets continued

These notes indicate which practice sheets are most appropriate for which groups.

### Day 4 Y3 Adding three and four 2-digit numbers Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE use expanded addition.

Working at ARE start at Q5 and do as many as they can using expanded or compact addition.

Greater Depth start at Q10 and use compact addition.

### Day 4 Y4 Whole class practice Sheet 2

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE use expanded column subtraction and do Q1-7.

Working at ARE choose expanded or compact column subtraction and start at Q5.

Greater Depth use compact column subtraction and do Q8-16.

### Day 5 Y3 Estimating totals and adding several 2-digit numbers Sheet 1

Working towards ARE / Working at ARE

Working at ARE complete the Challenge.

### Day 5 Y3 Estimating totals and adding several 2-digit numbers Sheet 2

Greater Depth

### Day 5 Y4 Subtraction strategies Sheet 3

Working towards ARE

### Day 5 Y4 Subtraction strategies Sheet 4

Working at ARE / Greater Depth

# Adding two 3-digit numbers

## Sheet 1

1.  $478 + 308$

2.  $540 + 427$

3.  $447 + 236$

4.  $683 + 234$

5.  $761 + 152$

6.  $572 + 334$

7.  $478 + 284$

8.  $363 + 249$

9.  $558 + 375$

10.  $608 + 297$

11.  $546 + 374$

12.  $379 + 426$

13.  $876 + 572$

14.  $738 + 427$

15.  $886 + 485$

16.  $945 + 478$

17.  $846 + 354$

18.  $675 + 486$

## Column addition

### Sheet 2

1.  $5246 + 2138$

2.  $4621 + 2734$

3.  $3284 + 2372$

4.  $5827 + 2434$

5.  $4582 + 2005$

6.  $6287 + 1458$

7.  $4843 + 2682$

8.  $3465 + 2999$

9.  $8422 + 5274$

10.  $6439 + 5248$

11.  $9372 + 4253$

12.  $4789 + 2654$

13.  $5624 + 4831$

14.  $8467 + 4285$

15.  $7895 + 1568$

16.  $6738 + 4694$

# Adding numbers to reach a target

## Sheet 1

Using your estimation skills select two of the numbers below that you think will add up to make a number close to the target numbers. Calculate the answers to check!

Choose two from these numbers:

283

521

349

378

452

217

146

354

Try to make these target numbers:



### Challenge

Which three numbers give a total closest to 1000?

# Subtracting 3-digit numbers

## Sheet 2

Use column subtraction to work out the answers, BUT watch out for one or two where you might be better using Frog!

1.  $654 - 327$

2.  $873 - 428$

3.  $625 - 371$

4.  $748 - 452$

5.  $923 - 658$

6.  $502 - 489$

7.  $834 - 536$

8.  $710 - 678$

9.  $927 - 560$

10.  $646 - 487$

### Challenge

Use the digits 4, 5, 6, 7, 8, 9 to create a 3-digit subtraction with an answer between 250 and 300.

## More 3-digit addition

### Sheet 1

Which of these have no 'carries'? Which have one carry? Which have two carries?

1.  $243 + 654$

2.  $732 + 254$

3.  $127 + 309$

4.  $427 + 186$

5.  $475 + 243$

6.  $341 + 135$

7.  $561 + 624$

8.  $583 + 265$

9.  $438 + 728$

10.  $648 + 781$

## More 3-digit numbers

### Sheet 2

Which of these have no 'carries'? Which have one carry? Which have two carries? Which have three carries?

1.  $341 + 135$

7.  $427 + 186$

2.  $127 + 309$

8.  $438 + 728$

3.  $475 + 243$

9.  $476 + 546$

4.  $561 + 624$

10.  $732 + 254$

5.  $648 + 583$

11.  $648 + 781$

6.  $243 + 654$

12.  $554 + 687$

#### Challenge

Write three more 3-digit additions, including at least one with 1 carry and one with 3 carries.



# Column subtraction of 3-digit numbers

## Sheet 3

1.  $343 - 218$

2.  $746 - 253$

3.  $837 - 351$

4.  $514 - 234$

5.  $823 - 465$

6.  $942 - 767$

7.  $535 - 278$

8.  $628 - 349$

## Column subtraction of 4-digit numbers

### Sheet 4

1.  $4563 - 2327$

2.  $4563 - 2381$

3.  $4563 - 2721$

4.  $9675 - 4236$

5.  $9675 - 4283$

6.  $9675 - 4733$

7.  $5472 - 3651$

8.  $4731 - 3206$

9.  $6348 - 3402$

Choose two subtractions to check using compact column addition.

# Adding three and four 2-digit numbers

## Sheet 1

1.  $42 + 30 + 25$

2.  $53 + 32 + 43$

3.  $34 + 25 + 32$

4.  $63 + 42 + 34$

5.  $52 + 27 + 36$

6.  $48 + 24 + 32$

7.  $36 + 28 + 19$

8.  $43 + 27 + 26$

9.  $28 + 39 + 27$

10.  $56 + 37 + 48$

11.  $74 + 56 + 36$

12.  $85 + 47 + 38$

13.  $42 + 34 + 14 + 35$

14.  $37 + 25 + 18 + 23$

15.  $45 + 24 + 50 + 34$

16.  $72 + 84 + 51 + 92$

17.  $78 + 89 + 58 + 67$

18.  $84 + 47 + 65 + 36$

19.  $58 + 73 + 87 + 45$

20.  $88 + 77 + 66 + 55$

## Whole class practice

### Sheet 2

1.  $4723 - 2518$

2.  $8542 - 5136$

3.  $9536 - 5252$

4.  $7528 - 3254$

5.  $6267 - 3423$

6.  $8564 - 4602$

7.  $9425 - 5284$

8.  $6273 - 4528$

9.  $7145 - 3312$

10.  $6523 - 4357$

11.  $8414 - 4276$

12.  $5478 - 3582$

13.  $9136 - 3240$

14.  $8234 - 4564$

15.  $7423 - 5745$

16.  $5132 - 3647$

## Estimating totals and adding several 2-digit numbers

### Sheet 1

- |    |                |           |        |
|----|----------------|-----------|--------|
| 1. | $28 + 56 + 19$ | Estimate: | Total: |
| 2. | $72 + 18 + 31$ | Estimate: | Total: |
| 3. | $46 + 33 + 25$ | Estimate: | Total: |
| 4. | $17 + 81 + 53$ | Estimate: | Total: |
| 5. | $34 + 65 + 22$ | Estimate: | Total: |
| 6. | $96 + 29 + 35$ | Estimate: | Total: |
| 7. | $72 + 46 + 89$ | Estimate: | Total: |

#### Challenge

- |     |                     |           |        |
|-----|---------------------|-----------|--------|
| 8.  | $82 + 37 + 24 + 16$ | Estimate: | Total: |
| 9.  | $67 + 13 + 44 + 51$ | Estimate: | Total: |
| 10. | $75 + 28 + 14 + 66$ | Estimate: | Total: |

## Estimating totals and adding several 2-digit numbers

### Sheet 2

- |    |                     |           |        |
|----|---------------------|-----------|--------|
| 1. | $34 + 65 + 22$      | Estimate: | Total: |
| 2. | $96 + 29 + 35$      | Estimate: | Total: |
| 3. | $82 + 37 + 24 + 16$ | Estimate: | Total: |
| 4. | $67 + 13 + 44 + 51$ | Estimate: | Total: |
| 5. | $75 + 28 + 14 + 66$ | Estimate: | Total: |
| 6. | $56 + 57 + 94 + 31$ | Estimate: | Total: |
| 7. | $12 + 77 + 23 + 52$ | Estimate: | Total: |
| 8. | $85 + 71 + 19 + 36$ | Estimate: | Total: |

#### Challenge

Using 8 different digits can you find four 2-digit numbers that total exactly 300?

## Subtraction strategies

### Sheet 3

Identify 4 questions that can be solved mentally; solve those then try the other 4 using compact or expanded decomposition.

$$385 - 199$$

$$786 - 224$$

$$648 - 201$$

$$500 - 475$$

$$482 - 348$$

$$519 - 276$$

$$423 - 287$$

$$605 - 247$$

## Subtraction strategies

### Sheet 4

Identify 5 questions that can be solved mentally; solve those then try the other 5 using compact or expanded decomposition.

$$385 - 199$$

$$786 - 224$$

$$7648 - 4201$$

$$5500 - 5476$$

$$6475 - 3251$$

$$2482 - 1348$$

$$519 - 276$$

$$3423 - 1287$$

$$615 - 247$$

$$5243 - 1567$$



# Addition and subtraction

## Answers

### Day 1 Y3 Adding two 3-digit numbers Sheet 1

- |                      |                       |                        |
|----------------------|-----------------------|------------------------|
| 1. $478 + 308 = 786$ | 7. $478 + 284 = 762$  | 13. $876 + 572 = 1448$ |
| 2. $540 + 427 = 967$ | 8. $363 + 249 = 612$  | 14. $738 + 427 = 1165$ |
| 3. $447 + 236 = 683$ | 9. $558 + 375 = 933$  | 15. $886 + 485 = 1371$ |
| 4. $683 + 234 = 917$ | 10. $608 + 297 = 905$ | 16. $945 + 478 = 1423$ |
| 5. $761 + 152 = 913$ | 11. $546 + 374 = 920$ | 17. $846 + 354 = 1200$ |
| 6. $572 + 334 = 906$ | 12. $379 + 426 = 805$ | 18. $675 + 486 = 1161$ |

### Day 2 Y4 Column addition Sheet 2

- |                         |                            |
|-------------------------|----------------------------|
| 1. $5246 + 2138 = 7384$ | 9. $8422 + 5274 = 13,696$  |
| 2. $4621 + 2734 = 7355$ | 10. $6439 + 5248 = 11,687$ |
| 3. $3284 + 2372 = 5656$ | 11. $9372 + 4253 = 13,625$ |
| 4. $5827 + 2434 = 8261$ | 12. $4789 + 2654 = 7443$   |
| 5. $4582 + 2005 = 6587$ | 13. $5624 + 4831 = 10,455$ |
| 6. $6287 + 1458 = 7745$ | 14. $8467 + 4285 = 12,752$ |
| 7. $4843 + 2682 = 7525$ | 15. $7895 + 1568 = 9463$   |
| 8. $3465 + 2999 = 6464$ | 16. $6738 + 4694 = 11,432$ |

### Day 2 Y3 Adding numbers to reach a target Sheet 1

- Target 500 e.g.  $283 + 217 = 500$   
Target 600 e.g.  $378 + 217 = 595$   
Target 700 e.g.  $349 + 354 = 703$   
Target 800 e.g.  $521 + 283 = 806$

#### Challenge

Target 1000, e.g.  $283 + 349 + 378 = 1010$

### Day 2 Y4 Subtracting 3-digit numbers Sheet 2

- $654 - 327 = 327$
- $873 - 428 = 445$
- $625 - 371 = 254$
- $748 - 452 = 296$
- $923 - 658 = 265$
- $502 - 489 = 13$
- $834 - 536 = 298$
- $710 - 678 = 32$
- $927 - 569 = 358$
- $646 - 487 = 159$

Questions 6 and 8 might be best solved using counting up (Frog). (Small difference, either side of a 100s number.)

# Addition and subtraction

## Answers

### Day 2 Y4 Subtracting 3-digit numbers Sheet 2 continued

#### Challenge

Use the digits 4, 5, 6, 7, 8, 9 to create a 3-digit subtraction with an answer between 250 and 300.

e.g.  $974 - 685 = 289$

$756 - 489 = 267$

### Day 3 Y3 More 3-digit addition Sheet 1

- $243 + 654 = 897$  No carries
- $732 + 254 = 986$  No carries
- $127 + 309 = 436$  1 carry
- $427 + 186 = 613$  2 carries
- $475 + 243 = 718$  1 carry
- $341 + 135 = 476$  No carries
- $561 + 624 = 1185$  1 carry
- $583 + 265 = 848$  1 carry
- $438 + 728 = 1166$  2 carries
- $648 + 781 = 1429$  2 carries

### Day 3 Y3 More 3-digit addition Sheet 2

- $341 + 135 = 476$  No carries
- $127 + 309 = 436$  1 carry
- $475 + 243 = 718$  1 carry
- $561 + 624 = 1185$  1 carry
- $648 + 583 = 1231$  3 carries
- $243 + 654 = 897$  No carries
- $427 + 186 = 613$  2 carries
- $438 + 728 = 1166$  2 carries
- $476 + 546 = 1022$  3 carries
- $732 + 254 = 986$  No carries
- $648 + 781 = 1429$  2 carries
- $554 + 687 = 1241$  3 carries

#### Challenge

Write 3 more 3-digit additions, including at least one with 1 carry and one with 3 carries.

Children should be noting that the numbers in each column incur a carry if they add up to a number greater than 9.

e.g.  $134 + 229 = 363$  1 carry

$459 + 653 = 1112$  3 carries

$542 + 168 = 710$  2 carries

# Addition and subtraction

## Answers

### Day 3 Y4 Column subtraction of 3-digit numbers Sheet 3

1.  $343 - 218 = 125$
2.  $746 - 253 = 493$
3.  $837 - 351 = 486$
4.  $514 - 234 = 280$
5.  $823 - 465 = 358$
6.  $942 - 767 = 175$
7.  $535 - 278 = 257$
8.  $628 - 349 = 279$

### Day 3 Y4 Column subtraction of 4-digit numbers Sheet 4

1.  $4563 - 2327 = 2236$
2.  $4563 - 2381 = 2182$
3.  $4563 - 2721 = 1842$
4.  $9675 - 4236 = 5439$
5.  $9675 - 4283 = 5392$
6.  $9675 - 4733 = 4942$
7.  $5472 - 3651 = 1821$
8.  $4731 - 3206 = 1525$
9.  $6348 - 3402 = 2946$

### Day 4 Y3 Adding three and four 2-digit numbers Sheet 1

- |                          |                               |
|--------------------------|-------------------------------|
| 1. $42 + 30 + 25 = 97$   | 11. $74 + 56 + 36 = 166$      |
| 2. $53 + 32 + 43 = 128$  | 12. $85 + 47 + 38 = 170$      |
| 3. $34 + 25 + 32 = 91$   | 13. $42 + 34 + 14 + 35 = 125$ |
| 4. $63 + 42 + 34 = 139$  | 14. $37 + 25 + 18 + 23 = 103$ |
| 5. $52 + 27 + 36 = 115$  | 15. $45 + 24 + 50 + 34 = 153$ |
| 6. $48 + 24 + 32 = 104$  | 16. $72 + 84 + 51 + 92 = 299$ |
| 7. $36 + 28 + 19 = 83$   | 17. $78 + 89 + 58 + 67 = 292$ |
| 8. $43 + 27 + 26 = 96$   | 18. $84 + 47 + 65 + 36 = 232$ |
| 9. $28 + 39 + 27 = 94$   | 19. $58 + 73 + 87 + 45 = 263$ |
| 10. $56 + 37 + 48 = 141$ | 20. $88 + 77 + 66 + 55 = 286$ |

### Day 4 Y4 Whole class practice Sheet 2

- |                         |                          |
|-------------------------|--------------------------|
| 1. $4723 - 2518 = 2205$ | 9. $7145 - 3312 = 3833$  |
| 2. $8542 - 5136 = 3406$ | 10. $6523 - 4357 = 2166$ |
| 3. $9536 - 5252 = 4284$ | 11. $8414 - 4276 = 4138$ |
| 4. $7528 - 3254 = 4274$ | 12. $5478 - 3582 = 1896$ |
| 5. $6267 - 3423 = 2844$ | 13. $9136 - 3240 = 5896$ |
| 6. $8564 - 4602 = 3962$ | 14. $8234 - 4564 = 3670$ |
| 7. $9425 - 5284 = 4141$ | 15. $7423 - 5745 = 1678$ |
| 8. $6273 - 4528 = 1745$ | 16. $5132 - 3647 = 1485$ |

# Addition and subtraction

## Answers

### Day 5 Y3 Estimating totals and adding several 2-digit numbers Sheet 1

1.  $28 + 56 + 19 = 103$
2.  $72 + 18 + 31 = 121$
3.  $46 + 33 + 25 = 104$
4.  $17 + 81 + 53 = 151$
5.  $34 + 65 + 22 = 121$
6.  $96 + 29 + 35 = 160$
7.  $72 + 46 + 89 = 207$

#### Challenge

8.  $82 + 37 + 24 + 16 = 159$
9.  $67 + 13 + 44 + 51 = 175$
10.  $75 + 28 + 14 + 66 = 183$

### Day 5 Y3 Estimating totals and adding several 2-digit numbers Sheet 2

1.  $34 + 65 + 22 = 121$
2.  $96 + 29 + 35 = 160$
3.  $82 + 37 + 24 + 16 = 159$
4.  $67 + 13 + 44 + 51 = 175$
5.  $75 + 28 + 14 + 66 = 183$
6.  $56 + 57 + 94 + 31 = 238$
7.  $12 + 77 + 23 + 52 = 164$
8.  $85 + 71 + 19 + 36 = 211$

#### Challenge

Using 8 different digits can you find four 2-digit numbers that total exactly 300?  
e.g.  $59 + 67 + 84 + 90 = 300$

### Day 5 Y4 Subtraction strategies Sheet 3

- $385 - 199 = 186$   
 $786 - 224 = 562$   
 $648 - 201 = 447$   
 $500 - 475 = 25$   
 $482 - 348 = 134$   
 $519 - 276 = 243$   
 $423 - 287 = 136$   
 $605 - 247 = 358$

### Day 5 Y4 Subtraction strategies Sheet 4

- $385 - 199 = 186$   
 $786 - 224 = 562$   
 $7648 - 4201 = 3447$   
 $5500 - 5476 = 24$   
 $6475 - 3251 = 3224$   
 $2482 - 1348 = 1134$   
 $519 - 276 = 243$   
 $3423 - 1287 = 2136$   
 $615 - 247 = 368$   
 $5243 - 1567 = 3676$