

Y3/4 More addition and subtraction Unit 3 (34332)

Additional teacher instructions for practice sheets

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

Day 1 Y3 Expanded addition Sheet 1

Working towards ARE

Day 1 Y3 Expanded addition Sheet 2

Working at ARE / Greater Depth

Greater Depth make up two additions that require 10 to be written on the waiting line.

Day 1 Y4 Written subtraction Sheet 3

Working towards ARE

Day 1 Y4 Written subtraction Sheet 4

Working at ARE / Greater Depth

Day 2 Y3 Expanded addition Sheet 1

Working towards ARE

Day 2 Y3 Expanded addition Sheet 2

Working at ARE / Greater Depth

Day 2 Y4 Written subtraction Sheet 3

Working towards ARE

Day 2 Y4 Written subtraction Sheet 4

Working at ARE

Day 2 Y4 Written subtraction Sheet 5

Greater Depth

Day 3 Y3 Estimate and add Sheet 1

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE complete as many from Parts A and B as they can.

Working at ARE complete as many as they can, starting at Part B. They estimate each answer first.

Greater Depth complete three from Part B, three from Part C, then all of Part D. They estimate each answer first.

Day 3 Y4 Subtraction using expanded decomposition Sheet 2

Working towards ARE

Day 3 Y4 Subtraction using expanded decomposition Sheet 3

Working at ARE / Greater Depth

Day 4 Y3 Subtract by counting up Sheet 1 (2 pages)

Working towards ARE / Working at ARE

Day 4 Y3 Subtract by counting up Sheet 2

Working at ARE / Greater Depth

Greater Depth make up two additions that require 10 to be written on the waiting line.

Day 4 Y4 Frog or decomposition Sheet 3

Working towards ARE / Working at ARE / Greater Depth

Working towards ARE complete Bronze and start Silver.

Working at ARE complete Bronze and Silver.

Greater Depth complete Silver and Gold.

Expanded addition

Sheet 1

$437 + 231$

400	30	7
200	30	1

$523 + 415$

500	20	3
400	10	5

$743 + 126$

700	40	3
100	20	6

$545 + 427$

500	40	5
400	20	7

$614 + 352$

$353 + 216$

$572 + 325$

$436 + 265$

Challenge

Write two additions with an answer of 888.

Expanded addition

Sheet 2

$342 + 454 =$

$116 + 236 =$

$723 + 142 =$

$239 + 344 =$

$515 + 371 =$

$625 + 147 =$

$163 + 425 =$

$378 + 414 =$

$328 + 661 =$

$245 + 338 =$

Challenge

Write two additions with an answer of 850. You can't use the digit '0' in either number!

Written subtraction

Sheet 3

1. $654 - 321 =$

2. $375 - 135 =$

3. $865 - 254 =$

4. $498 - 277 =$

5. $659 - 326 =$

6. $353 - 125 =$

7. $945 - 136 =$

8. $676 - 258 =$

Challenge

How many times can you subtract 123 from 492?

Written subtraction

Sheet 4

1. $654 - 325 =$

2. $375 - 117 =$

3. $865 - 254 =$

4. $497 - 279 =$

5. $656 - 328 =$

6. $355 - 126 =$

7. $965 - 137 =$

8. $662 - 256 =$

Challenge

How many times can you subtract 123 from 493?

Expanded addition

Sheet 1

1.

400	20	3
300	40	5

2.

600	10	3
200	50	6

3.

800	30	4
100	20	5

4.

300	40	2
200	50	6

5.

400	30	8
200	10	4

6.

500	40	9
200	30	5

Expanded addition

Sheet 2

1. $438 + 214$

2. $549 + 235$

3. $380 + 257$

4. $472 + 384$

5. $582 + 284$

6. $693 + 242$

7. $461 + 256$

8. $543 + 261$

Challenge

Write two additions with the answer 321. You can't use a zero in either number!

Written subtraction

Sheet 3

1. $355 - 127 =$

2. $473 - 265 =$

3. $581 - 329 =$

4. $370 - 108 =$

5. $444 - 228 =$

6. $973 - 366 =$

Challenge

Do $500 - 354$ by counting up using Frog.
Now do the same subtraction using column subtraction.

Can you explain to a partner which method you preferred and why?

Written subtraction

Sheet 4

1. $637 - 452 =$

2. $647 - 472 =$

3. $465 - 283 =$

4. $625 - 362 =$

5. $936 - 571 =$

6. $505 - 212 =$

7. $927 - 254 =$

8. $839 - 259 =$

Challenge

How many times can you subtract 141 from 829 before you get a number smaller than 141?

Estimate first and then test your theory.

Written subtraction

Sheet 5

1. $657 - 472 =$

2. $465 - 283 =$

3. $625 - 362 =$

4. $936 - 571 =$

5. $431 - 228 =$

6. $505 - 212 =$

7. $872 - 426 =$

8. $927 - 254 =$

9. $881 - 534 =$

10. $839 - 259 =$

Challenge

How many times can you subtract 156 from 873 before you get a number smaller than 156?

Estimate first and then test your theory.

Estimate and add

Sheet 1

For each question, estimate before you calculate the answer.

Part A

$444 + 555 =$

$245 + 333 =$

$771 + 227 =$

$345 + 123 =$

$432 + 234 =$

Part B

$237 + 157 =$

$828 + 136 =$

$656 + 228 =$

$528 + 407 =$

$436 + 258 =$

Part C

$291 + 342 =$

$383 + 274 =$

$445 + 391 =$

$470 + 384 =$

$635 + 174 =$

Part D

$623 + 195 =$

$308 + 433 =$

$456 + 356 =$

$784 + 147 =$

$372 + 379 =$

Subtraction using expanded decomposition

Sheet 2

For each question, estimate before you calculate the answer. Check your final answer using addition.

Section A

$$999 - 236 =$$

$$888 - 358 =$$

$$777 - 631 =$$

$$666 - 352 =$$

$$555 - 142 =$$

$$444 - 234 =$$

$$333 - 231 =$$

$$222 - 112 =$$

Section B

$$998 - 239 =$$

$$887 - 396 =$$

$$776 - 648 =$$

$$665 - 372 =$$

$$554 - 262 =$$

$$443 - 234 =$$

$$332 - 224 =$$

$$221 - 112 =$$

Subtraction using expanded decomposition

Sheet 3

For each question, estimate before you calculate the answer. Check your final answer using addition.

Section A

$$998 - 239 =$$

$$887 - 396 =$$

$$776 - 648 =$$

$$665 - 372 =$$

$$554 - 262 =$$

$$443 - 234 =$$

$$332 - 224 =$$

$$221 - 112 =$$

Section B

$$921 - 533 =$$

$$821 - 444 =$$

$$721 - 277 =$$

$$621 - 355 =$$

$$521 - 266 =$$

$$421 - 188 =$$

$$321 - 232 =$$

$$802 - 374 =$$

$$960 - 438 =$$

Challenge

Create a subtraction like this: $8\triangle * - 4\square\lozenge$ where the answer consists of 3 consecutive numbers in decreasing order, e.g. 654 or 987.

Subtract by counting up
Sheet 1

$115 - 87$

$125 - 78$

$141 - 69$

$134 - 75$

$124 - 57$

$145 - 68$

$135 - 86$

$124 - 67$

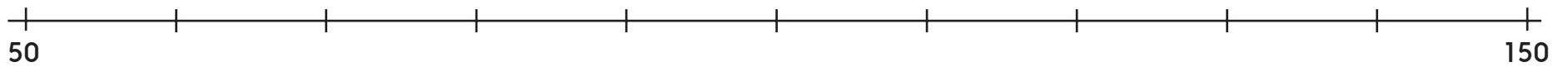
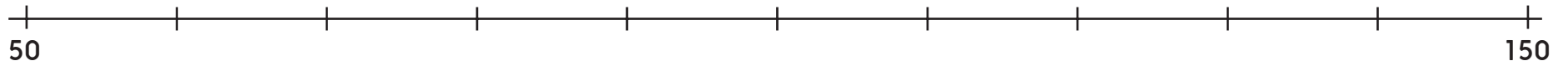
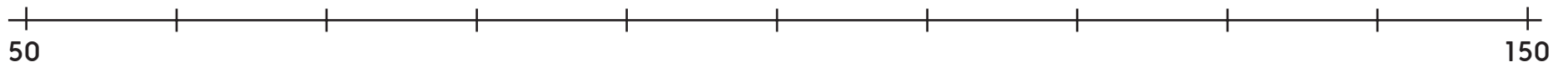
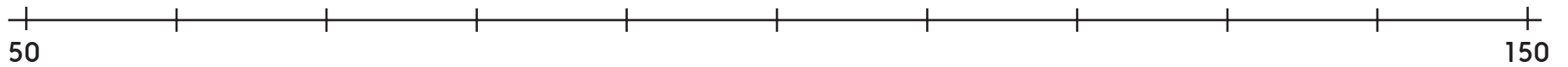
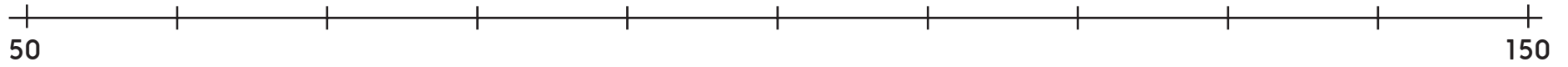
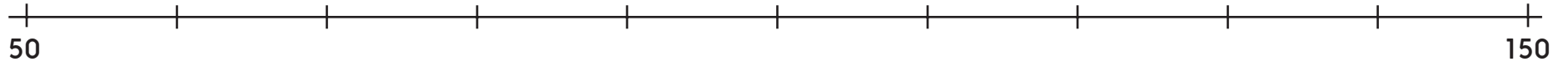
$147 - 73$

Challenge

Choose two subtractions to check with addition.

Subtract by counting up

Sheet 1 continued



Subtract by counting up
Sheet 2

$147 - 73$

$134 - 75$

$124 - 57$

$145 - 68$

$138 - 89$

$127 - 68$

$132 - 55$

$143 - 66$

$131 - 74$

Challenge

Choose two subtractions to check with addition.

Frog or decomposition?

Sheet 3

Choose whether to use Frog or expanded decomposition to solve each of these calculations.

For each one, explain why you chose that method.

Bronze

$$263 - 104$$

$$800 - 756$$

$$504 - 375$$

$$452 - 123$$

Silver

$$206 - 163$$

$$754 - 462$$

$$572 - 365$$

$$630 - 244$$

$$900 - 332$$

Gold

$$469 - 278$$

$$803 - 289$$

$$700 - 138$$

$$1592 - 924$$

Challenge

Create a 3-digit number. Reverse the digits and find the difference. Do this five times.

Can you explain why the tens digit of the answer is always the same?

More addition and subtraction

Answers

Day 1 Y3 Expanded addition Sheet 1

$437 + 231 = 668$

$743 + 126 = 869$

$523 + 415 = 938$

$545 + 427 = 972$

$614 + 352 = 966$

$353 + 216 = 569$

$572 + 325 = 897$

$436 + 265 = 701$

Challenge

Accept correctly laid out answers where total is 888, e.g. $444 + 444$, $350 + 538$, $480 + 408$, $738 + 150$, etc.

Day 1 Y3 Expanded addition Sheet 2

$342 + 454 = 796$

$723 + 142 = 865$

$515 + 371 = 886$

$163 + 425 = 588$

$328 + 661 = 989$

$116 + 236 = 352$

$239 + 344 = 583$

$625 + 147 = 772$

$378 + 414 = 792$

$245 + 338 = 583$

Challenge

Accept answers where total is 850, e.g. $437 + 413$, $629 + 221$, $532 + 318$, etc.

Day 1 Y4 Written subtraction Sheet 3

$654 - 321 = 333$

$375 - 135 = 240$

$865 - 254 = 611$

$498 - 277 = 221$

$659 - 326 = 333$

$353 - 125 = 228$

$945 - 136 = 809$

$676 - 258 = 418$

Challenge

$492 - 123 = 369$

$369 - 123 = 246$

$246 - 123 = 123$

$123 - 123 = 0$

(four times)

Day 1 Y4 Written subtraction Sheet 4

$654 - 325 = 329$

$375 - 117 = 258$

$865 - 254 = 611$

$497 - 279 = 218$

$656 - 328 = 328$

$355 - 126 = 229$

$965 - 137 = 828$

$662 - 256 = 406$

Challenge

$493 - 123 = 370$

$370 - 123 = 247$

$247 - 123 = 124$

$124 - 123 = 1$

(four times)

More addition and subtraction

Answers

Day 2 Y3 Expanded addition Sheet 1

1. $423 + 345 = 768$
2. $613 + 256 = 869$
3. $834 + 125 = 959$
4. $342 + 256 = 598$
5. $438 + 214 = 652$
6. $549 + 235 = 784$

Day 2 Y3 Expanded addition Sheet 2

1. $438 + 214 = 652$
2. $549 + 235 = 784$
3. $380 + 257 = 637$
4. $472 + 384 = 856$
5. $582 + 284 = 866$
6. $693 + 242 = 935$
7. $461 + 256 = 717$
8. $543 + 261 = 804$

Challenge

Accept answers where the total is 321, e.g. $198 + 123$, $167 + 154$, $272 + 49$, etc.

Day 2 Y4 Written subtraction Sheet 3

- $355 - 127 = 228$
 $473 - 265 = 208$
 $581 - 329 = 252$
 $370 - 108 = 262$
 $444 - 228 = 216$
 $973 - 366 = 607$

Challenge

Children talk about which method they preferred to reach the answer: $500 - 354 = 146$

Day 2 Y4 Written subtraction Sheet 4

- $637 - 452 = 185$
 $647 - 472 = 175$
 $465 - 283 = 182$
 $625 - 362 = 263$
 $936 - 571 = 365$
 $505 - 212 = 293$
 $927 - 254 = 673$
 $839 - 259 = 580$

Challenge

- $829 - 141 = 688$
 $688 - 141 = 547$
 $547 - 141 = 406$
 $406 - 141 = 265$
 $265 - 141 = 124$

(five times)

More addition and subtraction

Answers

Day 2 Y4 Written subtraction Sheet 5

$657 - 472 = 185$

$465 - 283 = 182$

$625 - 362 = 263$

$936 - 571 = 365$

$431 - 228 = 203$

$505 - 212 = 293$

$872 - 426 = 446$

$927 - 254 = 673$

$881 - 534 = 347$

$839 - 259 = 580$

Challenge

$873 - 156 = 717$

$717 - 156 = 561$

$561 - 156 = 405$

$405 - 156 = 249$

$249 - 156 = 93$

(five times)

Day 3 Y3 Estimate and add Sheet 1

Part A

$444 + 555 = 999$

$245 + 333 = 578$

$771 + 227 = 998$

$345 + 123 = 468$

$432 + 234 = 666$

Part B

$237 + 157 = 394$

$828 + 136 = 964$

$656 + 228 = 884$

$528 + 407 = 935$

$436 + 258 = 694$

Part C

$291 + 342 = 633$

$383 + 274 = 657$

$445 + 391 = 836$

$470 + 384 = 854$

$635 + 174 = 809$

Part D

$623 + 195 = 818$

$308 + 433 = 741$

$456 + 356 = 812$

$784 + 147 = 931$

$372 + 379 = 751$

Day 3 Y4 Subtraction using expanded decomposition Sheet 2

Section A

$999 - 236 = 763$

$888 - 358 = 530$

$777 - 631 = 146$

$666 - 352 = 314$

$555 - 142 = 413$

$444 - 234 = 210$

$333 - 231 = 102$

$222 - 112 = 110$

Section B

$998 - 239 = 759$

$887 - 396 = 491$

$776 - 648 = 128$

$665 - 372 = 293$

$554 - 262 = 292$

$443 - 234 = 209$

$332 - 224 = 108$

$221 - 112 = 109$

More addition and subtraction

Answers

Day 3 Y4 Subtraction using expanded decomposition Sheet 3

Section A

$998 - 239 = 759$

$887 - 396 = 491$

$776 - 648 = 128$

$665 - 372 = 293$

$554 - 262 = 292$

$443 - 234 = 209$

$332 - 224 = 108$

$221 - 112 = 109$

Section B

$921 - 533 = 388$

$821 - 444 = 377$

$721 - 277 = 444$

$621 - 355 = 266$

$521 - 266 = 255$

$421 - 188 = 233$

$321 - 232 = 89$

$802 - 374 = 428$

$960 - 438 = 522$

Challenge

e.g $893 - 461 = 432$
 $864 - 432 = 432$
 $853 - 421 = 432$
 $837 - 405 = 432... \text{ etc}$

Day 4 Y3 Subtract by counting up Sheet 1

$115 - 87 = 28$

$125 - 78 = 47$

$141 - 69 = 72$

$134 - 75 = 59$

$124 - 57 = 67$

$145 - 68 = 77$

$135 - 86 = 49$

$124 - 67 = 57$

$147 - 73 = 74$

Day 4 Y3 Subtract by counting up Sheet 2

$147 - 73 = 74$

$134 - 75 = 59$

$124 - 57 = 67$

$145 - 68 = 77$

$138 - 89 = 49$

$127 - 68 = 59$

$132 - 55 = 77$

$143 - 66 = 77$

$131 - 74 = 57$

Day 4 Y4 Frog or decomposition? Sheet 3

Bronze

$263 - 104 = 159$

$800 - 756 = 44$

$504 - 375 = 129$

$452 - 123 = 329$

Silver

$206 - 163 = 43$

$754 - 462 = 292$

$572 - 365 = 207$

$630 - 244 = 386$

$900 - 332 = 568$

Gold

$469 - 278 = 191$

$803 - 289 = 514$

$700 - 138 = 562$

$1592 - 924 = 668$

Challenge

The tens digit of the answer is always 9. This is because the two tens digits start the same, but you always have to exchange a ten, leaving one less ten on the top than on the bottom. The subtraction then always gives a difference of 9 in that column.