Y3 – Autumn – Block 1 – Step 3 – 100s, 10s and 1s (1) Answers
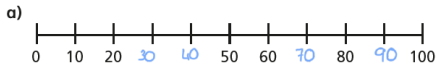
Question	Answer
1	a) 345 b) 518 c) 203
2	a) 4 hundreds, 2 tens and 6 ones b) 1 hundred and 5 tens c) 5 hundreds, 3 tens and 2 ones
3	a) 469 b) 337 c) 950 d) 803
4	a) 348 is equal to 3 hundreds, 4 tens and 8 ones. b) 673 is equal to 6 hundreds, 7 tens and 3 ones. c) 792 is equal to 7 hundreds, 9 tens and 2 ones. d) 308 is equal to 3 hundreds and 8 ones. e) 751 is equal to 7 hundreds, 5 tens and 1 one. f) 802 is equal to 8 hundreds and 2 ones.

5	a) 432 = 400 + 30 + 2
	   435 = 400 + 30 + 5
	   437 = 400 + 30 + 7
	b) 520 = 500 + 20
	   502 = 500 + 2
	c) 392 = 300 + 90 + 2
	   392 = 92 + 300
	   392 = 2 + 390

6	a) 30 (3 tens) b) 300 (3 hundreds) c) 3 (3 ones) d) 300 (3 hundreds)
7	a) 194 or 491 b) 304, 340, 403, 430
8	462, 604

Question	Answer
1	There are 529 sweets.
2	
3	a) 734 b) 392 c) 210 d) 72
4	a) b) c)
5	a) b) any numbers with a digit total of 10, e.g. 325 or 811 c) 910
6	false Whitney has mixed the tens and ones up. She is thinking of 583
7	a) 413 b) 233, 215, 224

1 Complete the number lines.

a)

0 10 20 *30* *40* 50 60 *70* 80 *90* 100

b)

20 *21* 22 *23* 24 *25* 26 27 *28* 29 30

c)

50 52 *54* 56 *58* 60 *62* *64* 66 *68* 70

2

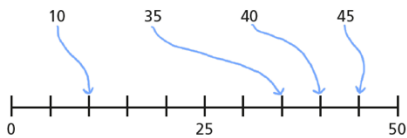Ron

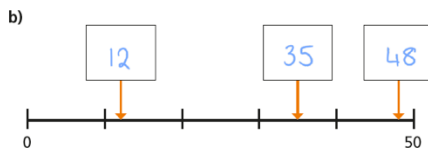I think this number line goes up in 5s.

0 *5* *10* *15* 20 *25* *30* *35* *40* *45* 50

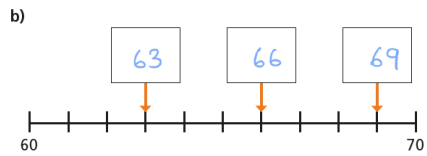Show a partner that Ron is correct.

b)

10   35   40   45

0   25   50

5 Estimate the numbers the arrows are pointing to.

a)

| 19 | | 47 | | 78 |

0   100

b)

| 12 | | 35 | | 48 |

0   50
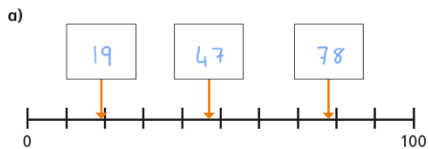
3 What numbers are the arrows pointing to?

a)

| 20 | | 50 | | 75 |

0   100

b)

| 63 | | 66 | | 69 |

60   70
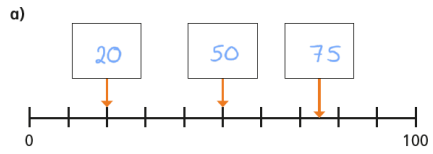
4 Draw an arrow to show where each number belongs on the number line.

a)

5   30   45   80

0   100

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6 Complete the number lines.

a)

0   *20*   *40*   *60*   *80*   100

b)

0   *25*   *50*   *75*   100
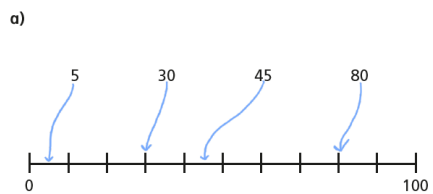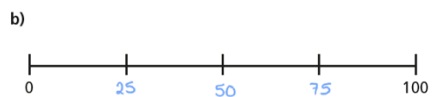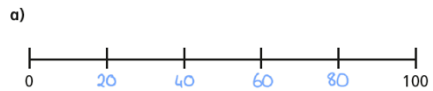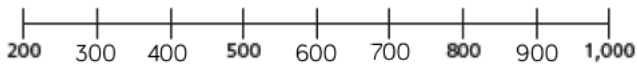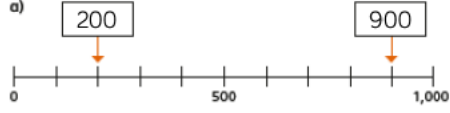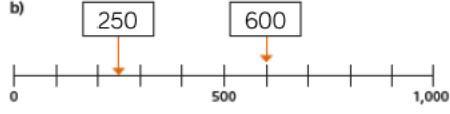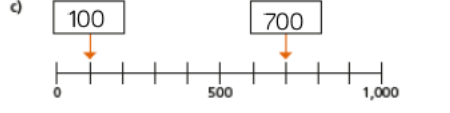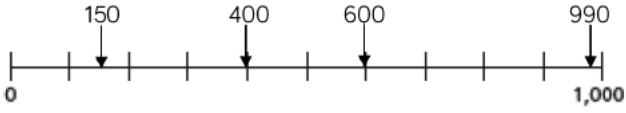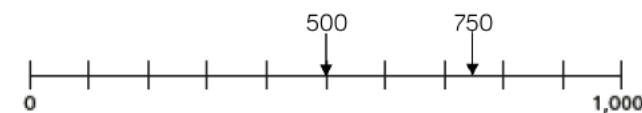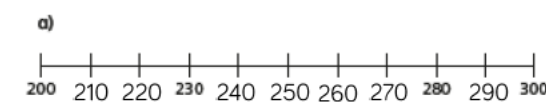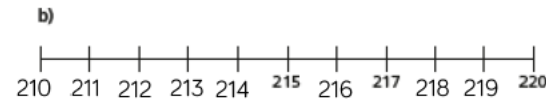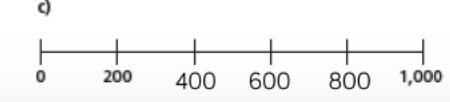
7 Estimate where these numbers belong on the number line.

27   48   79

0   100
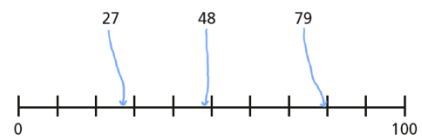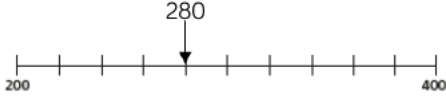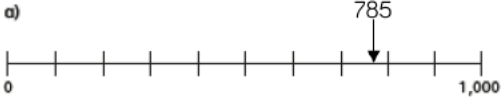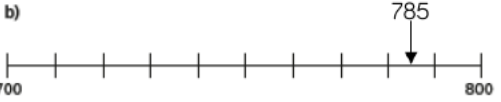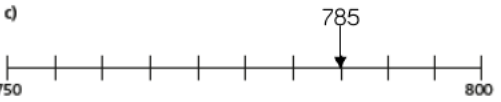
How did you do this? Talk about it with a partner.

Question	Answer
1	A number line from 200 to 1,000 with marks at 200, 300, 400, 500, 600, 700, 800, 900, 1,000
2	a) 200 and 900 marked on a number line from 0 to 1,000 b) 250 and 600 marked on a number line from 0 to 1,000 c) 100 and 700 marked on a number line from 0 to 1,000
3	150, 400, 600, 990 marked on a number line from 0 to 1,000
4	500 and 750 marked on a number line from 0 to 1,000
5	a) 200 210 220 230 240 250 260 270 280 290 300 b) 210 211 212 213 214 215 216 217 218 219 220 c) 0 200 400 600 800 1,000

Question	Answer
6	a) 470 ├─────────────────▼─────────────────┤ 400 500 b) 280 ├──┬──┬──▼──┬──┬──┬──┬──┬──┤ 200 400
7	Alex is incorrect. The number line is going up in 50s If the number line was going up in 100s, the last number would be 2,000
8	a) 785 ├──┬──┬──┬──┬──┬──┬──▼──┬──┤ 0 1,000 b) 785 ├──┬──┬──┬──┬──┬──┬──▼──┬──┤ 700 800 c) 785 ├──┬──┬──┬──┬──┬──▼──┬──┤ 750 800
9	Children may decide to divide the number line up into different intervals to help them place the numbers. 30 300 750 995 ├─▼────────▼──────────────▼───▼──┤ 0 1,000

Question	Answer
1	a) Annie has made the number 315 b) 100 more than Annie's number is 415 c) 10 more than Annie's number is 325 d) 1 more than Annie's number is 316

2	The number represented is 492
	a) 100 more than the number is 592
	   10 more than the number is 502
	   1 more than the number is 493
	b) 100 less than the number is 392
	  10 less than the number is 482
	  1 less than the number is 491

3	a) 800 b) 485 c) 690 d) 147
4	a) 372 b) 190 c) 713 d) 705
5	a) 779 b) 235 c) 290 d) 394
6	a) 100 more than 763 is 863 b) 865 is 100 more than 765 c) 403 is 100 less than 503 d) 1 less than 300 is 299 e) 10 less than 109 is 99 f) 962 is 10 less than 972 g) 698 is 1 less than 699
7	Tom's number could have been 502, 412 or 403
8	(see table below)
9	990 is 10 less than Kim's number.

Question 8 table:

100 more	10 more	1 more	number	1 less	10 less	100 less
573	483	474	473	472	463	373
398	308	299	298	297	288	198
1,000	910	901	900	899	890	800

Question	Answer
1	a) Dora has 462 bricks. b) Ron has 526 bricks. c) Ron has the greater number of bricks. There are more hundreds boxes and 500 is greater than 400, so 526 is greater than 462
2	a) 512 b) 720 c) 528 d) 300
3	Amir 500 is greater than 300 so Amir's number must be greater.
4	Practical activity: use 8 pieces of base 10 to make different numbers and compare them with their partner's numbers. They will make a range of numbers that have a digit total of 8
5	a) > b) <
6	3 counters added to the right-hand place value chart to make the statement correct: 1 counter added to hundreds column if at least 1 counter added to tens column; or 2 or 3 counters added to hundreds column.
7	604, 613, 622, 631 or 640

Question	Answer
1	359
2	817
3	370
4	700, 396, 400
5	634, 715, 66
6	a) b) c) > d) the ones columns
7	a) 328 is less than 344 b) 916 is greater than 490 c) 510 is less than 517
8	Steel Man lasts the longest.
9	a) b) c) > d) > e) > f) > g) = h) <

10	a) 5, 4, 3, 2 or 1
	    0 or 1
	    0
	b) 6, 7, 8 or 9
	    any digit
	    any digit

11	a) 8, 9 b) 7, 8, 9 c) 9

Question	Answer
1	Tommy has the greatest number of marbles.
2	A
3	a) 400 b) 390 c) 719 d) 438
4	a) 405, 412, 429, 718 b) 73, 99, 200, 620 c) 95, 509, 595, 1,000
5	any two of: 645, 646, 647, 648, 649, 650, 651
6	a) 9 g, 32 g, 230 g, 302 g, 320 g b) The 3rd tallest person is Dani.
7	£279, £199, £195, £179
8	a) The first number could be 405, 415, 425, 435, 445, 455 or 465 If the first number is 465, the second number could be 466, 467, 468 or 469 If the first number is less than 465, the second number could have any number of ones. The third number could be 558, 658, 758, 858 or 958 b) The first number could be 465, 475, 485 or 495 If the first number is 465, the second number could be 464, 463, 462, 461 or 460 If the first number is more 465, the second number could have any number of ones. The third number could be 458, 358, 258 or 158
9	0, 1, 2, 3, 4 or 5 056 < 703 < 750 (discussion could be had around the fact we would not write '056') 156 < 713 < 751 256 < 723 < 752 356 < 733 < 753 456 < 743 < 754 556 < 753 < 755

Question	Answer
1	Filip has 100 cards. Eva has 150 cards. Mo has 200 cards. Aisha has 350 cards. Teddy has 400 cards.
2		200	250	300	350	400	450	500	550 | | 650	700	750	800	850	900	950	1,000 | | 650	600	550	500	450	400	350	300	
3	750, 350, 800, 950
4	
5	False, three lots of 50 grams are the same as 150 g. 250 g is heavier than 150g
6	a) Whitney has scored 350 points. b) Four darts on the 100 points, one dart on the 50 points. c) Dexter is incorrect. He could score 450 points if he had 3 darts on 100 points and 3 darts on 50 points. This is because 300 + 150 = 450
7	There is 550 pence altogether. There is £5 and 50 pence altogether.