

# Y5/6 Place value Unit 1 (56110)

## Additional teacher instructions for practice sheets

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

**Day 1 Y5 Place value additions and subtractions Sheet 1**

Working towards ARE

**Day 1 Y5 Place value additions and subtractions Sheet 2**

Working at ARE / Greater Depth

**Day 1 Y6 Place value additions and subtractions Sheet 3**

Working towards ARE

**Day 1 Y6 Place value additions and subtractions Sheet 4**

Working at ARE / Greater Depth

**Day 2 Y5 Adding and subtracting 1, 10, 100, 1000 and 10,000 Sheet 1**

Working towards ARE

**Day 2 Y5 Adding and subtracting 1s, 10s, 100s, 1000s and 10,000s Sheet 2**

Working at ARE / Greater Depth

**Day 2 Y6 Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s Sheet 3**

Working towards ARE

**Day 2 Y6 Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s Sheet 4**

Working at ARE / Greater Depth

**Day 3 Y5 Comparing 5-digit numbers Sheet 1**

Working towards ARE / Working at ARE

**Day 3 Y5 Ordering 5-digit numbers Sheet 2**

Greater Depth

**Day 3 Y6 Comparing numbers up to 1 million Sheet 3**

Working towards ARE

**Day 3 Y6 Comparing numbers up to 1 million Sheet 4**

Working at ARE / Greater Depth

Working at ARE complete questions 1 to 14.

Greater Depth complete all questions.

## Place value additions and subtractions

### Sheet 1

Complete these number sentences.

$$20,000 + 450 = \boxed{\phantom{00000}}$$

$$5003 + \boxed{\phantom{00000}} = 45,523$$

$$31,000 + \boxed{\phantom{00000}} = 31,273$$

$$10,000 + \boxed{\phantom{00000}} = 10,725$$

$$40,444 + \boxed{\phantom{00000}} = 44,444$$

$$70,777 + \boxed{\phantom{00000}} = 77,777$$

$$34,270 - 270 = \boxed{\phantom{00000}}$$

$$52,235 - 50,000 = \boxed{\phantom{00000}}$$

$$24,752 - \boxed{\phantom{00000}} = 24,702$$

$$72,896 - \boxed{\phantom{00000}} = 896$$

$$44,444 - \boxed{\phantom{00000}} = 40,444$$

$$45,345 - \boxed{\phantom{00000}} = 5345$$

## Place value additions and subtractions

### Sheet 2

Complete these number sentences.

$$43,680 - \boxed{\phantom{00000}} = 40,080$$

$$3780 + \boxed{\phantom{00000}} = 83,781$$

$$28,134 - \boxed{\phantom{00000}} = 28,004$$

$$402 + \boxed{\phantom{00000}} = 75,412$$

$$65,036 - \boxed{\phantom{00000}} = 5030$$

$$\boxed{\phantom{00000}} + 2700 = 62,745$$

$$93,489 - \boxed{\phantom{00000}} = 409$$

$$\boxed{\phantom{00000}} + 3040 = 83,276$$

$$20,406 + \boxed{\phantom{00000}} = 23,476$$

$$\boxed{\phantom{00000}} - 20,450 = 7008$$

$$51,080 + \boxed{\phantom{00000}} = 51,983$$

$$\boxed{\phantom{00000}} - 8,078 = 70,600$$

## Place value additions and subtractions

### Sheet 3

Complete these number sentences.

$$430,000 + 6000 = \boxed{\phantom{000000}}$$

$$200,000 + \boxed{\phantom{000000}} = 234,800$$

$$770,777 + \boxed{\phantom{000000}} = 777,777$$

$$744,522 - 522 = \boxed{\phantom{000000}}$$

$$600,233 - 200 = \boxed{\phantom{000000}}$$

$$645,005 - \boxed{\phantom{000000}} = 5005$$

$$800,370 + 22,008 = \boxed{\phantom{000000}}$$

$$904,678 + \boxed{\phantom{000000}} = 924,678$$

$$534,027 + \boxed{\phantom{000000}} = 534,627$$

$$827,410 - 7000 = \boxed{\phantom{000000}}$$

$$272,896 - \boxed{\phantom{000000}} = 200,896$$

$$852,462 - \boxed{\phantom{000000}} = 850,062$$

#### Challenge

There are 45,874 books in a library. There are enough shelves for 40,700.  
How many books still need shelving?

## Place value additions and subtractions

### Sheet 4

Complete these number sentences.

$$430,000 + 6378 = \boxed{\phantom{000000}}$$

$$805,370 + 20,007 = \boxed{\phantom{000000}}$$

$$234,000 + \boxed{\phantom{000000}} = 234,846$$

$$904,678 + \boxed{\phantom{000000}} = 924,678$$

$$770,777 + \boxed{\phantom{000000}} = 777,777$$

$$504,027 + \boxed{\phantom{000000}} = 534,627$$

$$734,523 - 523 = \boxed{\phantom{000000}}$$

$$827,410 - 27,000 = \boxed{\phantom{000000}}$$

$$652,235 - 50,000 = \boxed{\phantom{000000}}$$

$$272,896 - \boxed{\phantom{000000}} = 200,896$$

$$645,345 - \boxed{\phantom{000000}} = 5345$$

$$852,462 - \boxed{\phantom{000000}} = 802,060$$

#### Challenge

There are 345,874 items in a museum. 300,404 are in display cases.  
How many are not yet on display?

# Adding and subtracting 1, 10, 100, 1000 and 10,000

## Sheet 1

$44,444 + 1 =$

$88,888 - 1 =$

$34,872 + 10 =$

$95,342 - 1 =$

$44,444 + 10 =$

$88,888 - 10 =$

$34,872 + 1000 =$

$95,342 - 100 =$

$44,444 + 100 =$

$88,888 - 100 =$

$34,872 + 1 =$

$95,342 - 1000 =$

$44,444 + 1000 =$

$88,888 - 1000 =$

$34,872 + 100 =$

$95,342 - 10,000 =$

$44,444 + 10,000 =$

$88,888 - 10,000 =$

$34,872 + 10,000 =$

$95,342 - 10 =$

## Adding and subtracting 1s, 10s, 100s, 1000s and 10,000s

### Sheet 2

$32,473 + 2 =$

$97,657 - 4 =$

$24,734 + 200 =$

$85,346 - 30,000 =$

$32,473 + 20 =$

$97,657 - 40 =$

$24,734 + 50 =$

$85,346 - 20 =$

$2,473 + 200 =$

$97,657 - 400 =$

$24,734 + 40,000 =$

$85,346 - 4000 =$

$2,473 + 2000 =$

$97,657 - 4000 =$

$24,734 + 3000 =$

$85,346 - 200 =$

$32,473 + 20,000 =$

$97,657 - 40,000 =$

$24,734 + 5 =$

$85,346 - 4 =$

#### Challenge

Start with 22,222 and throw a 1-6 dice. Every time you throw, you can add that number of 1s, 10s, 100s, 1000s, 10,000s or 100,000s. For example, if you throw a 3, you could add 3000 to 22,222. The aim is to get exactly 99,999 but you must not go over! Estimate first how many throws it will take. Then try. Now estimate again, and try again.

**Further challenge:** Suggest a combination of throws needed to get from 22,222 to 99,999 in the shortest time...

## Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s

### Sheet 3

1.  $546,823 + 20,000 =$

2.  $728,281 - 5000 =$

3.   $= 238,194 - 60$

4.   $= 182,356 + 400$

5.  $428,390 + 500,000 =$

6.   $= 794,123 - 40,000$

7.  $421,329 + 70 =$

8.  $482,949 - 6 =$

#### Challenge

Make up your own place value additions and subtractions where one digit changes. Can you write 6 questions, changing a digit with different place value each time.



## Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s

### Sheet 4

1.  $452,845 + 21,000 =$
2.  $874,246 - 3001 =$
3.   $= 378,123 - 200,002$
4.  $945,184 - 3200 =$
5.   $= 4200 + 342,781$
6.  $834,872 - 30,500 =$
7.  $962,378 - 500,200 =$
8.   $= 20,450 + 278,235$

#### Challenge

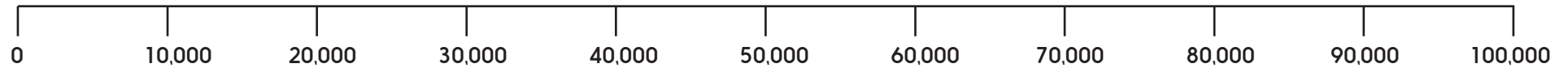
Make up your own place value additions and subtractions where two digits change.  
Make up your own place value addition and subtraction where three digits change.

# Comparing 5-digit numbers

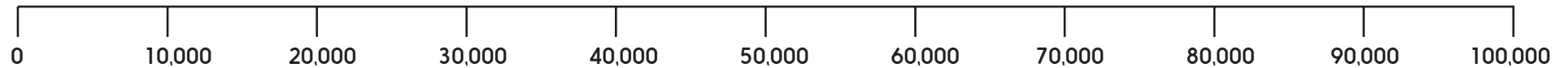
## Sheet 1

Mark each pair of numbers on the number line. Write  $<$  or  $>$  between each pair.

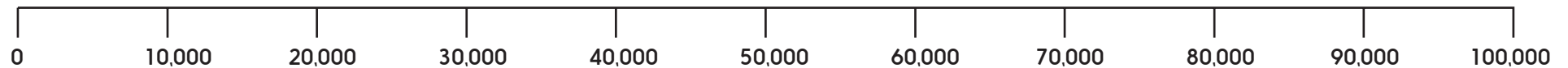
52,000    25,000                      86,200    82,600                      93,500    90,350



15,720    12,750                      86,190    86,910                      45,490    54,490



76,543    73,456                      50,590    52,950                      23,871    21,178



## Ordering 5-digit numbers

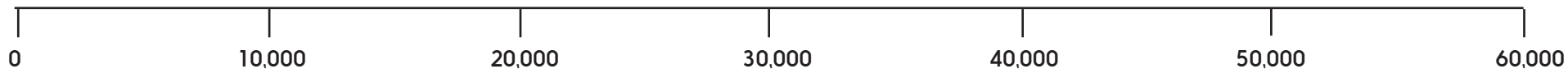
### Sheet 2

Use the digits 1 to 5 to make at least three numbers between 20,000 and 40,000. Mark them on the number line.

Use the digits 1 to 5 to make at least three numbers between 15,000 and 25,000. Mark them on the number line.

Use the digits 1 to 5 to make at least three numbers between 40,000 and 45,000. Mark them on the number line.

Use the digits 1 to 5 to make one number as close to 50,000 as you can. Mark it on the number line in a different colour,

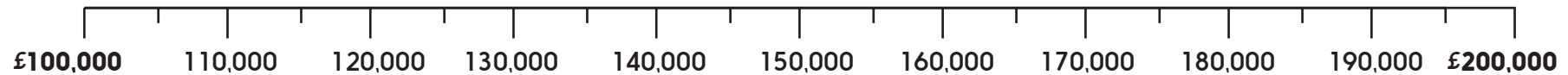


# Comparing numbers up to 1 million

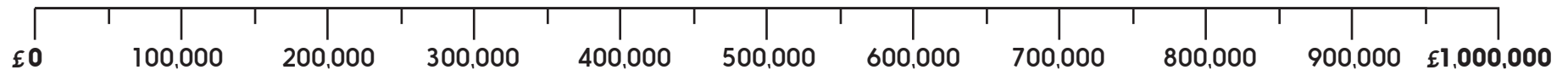
## Sheet 3

Look at the property prices below each number line and mark them on the number line.

### Prices of small homes in the UK (2017)



1. 2-bedroom flat, Dundee £150,000
2. 3-bedroom terraced house, Hull £155,000
3. 2-bedroom apartment, Chelmsford, £175,000



4. 2-bedroom semi, Cambridge, £350,000
5. 1-bedroom apartment, central Bath, £550,000
6. 2-bedroom apartment, Canary Wharf, London £650,000
7. 1-bedroom flat, Knightsbridge, London £825,000

Write > or < between each pair of numbers.

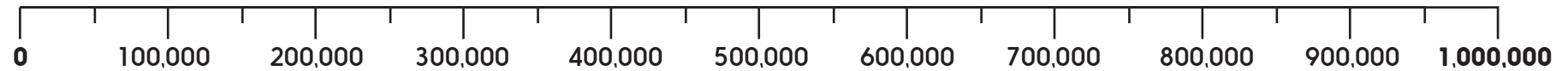
8. 564,000    465,000
9. 129,876    213,000
10. 824,567    842,567

# Comparing numbers up to 1 million

## Sheet 4

Look at the data below each number line. Mark populations in the correct places.

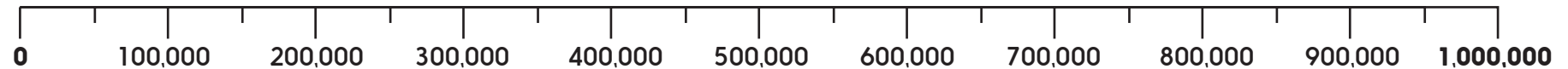
### Populations of 20 UK cities (2011)



1. Aberdeen 189,000
2. Cardiff 346,000
3. Edinburgh 468,000
4. Glasgow 603,000

5. Lancaster 138,000
6. Leeds 751,000
7. Liverpool 466,500

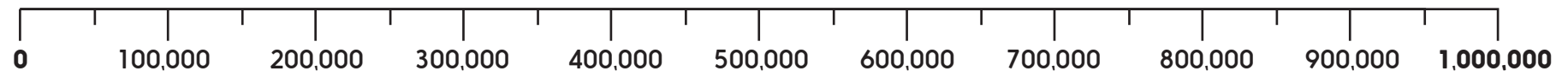
Choose two populations.  
Write  $<$  or  $>$  between the two numbers.



8. Belfast 333,900
9. Bradford 522,400
10. Bristol 428,200
11. Derby 248,800

12. Exeter 117,800
13. Leicester 329,800
14. Manchester 503,100

Choose two populations.  
Write  $<$  or  $>$  between the two numbers.



15. Newcastle-upon-Tyne 280,170
16. Oxford 151,910
17. Portsmouth 205,050
18. Sheffield 552,690

19. Swansea 239,020
20. York 198,051

### Challenge

Choose two numbers on one of your lines.  
Write the number that comes half way between these.  
Be careful which two you choose - it makes a difference!

# Place value

## Answers

### Day 1 Y5 Place value additions and subtractions Sheet 1

$20,000 + 450 = 20,450$	$5003 + 40,520 = 45,523$
$31,000 + 273 = 31,273$	$10,000 + 725 = 10,725$
$40,444 + 4000 = 44,444$	$70,777 + 7000 = 77,777$
$34,270 - 270 = 34,000$	$52,235 - 50,000 = 2235$
$24,752 - 50 = 24,702$	$72,896 - 72,000 = 896$
$44,444 - 4000 = 40,444$	$45,345 - 40,000 = 5345$

### Day 1 Y5 Place value additions and subtractions Sheet 2

$43,680 - 3600 = 40,080$	$3780 + 80,001 = 83,781$
$28,134 - 130 = 28,004$	$402 + 75,010 = 75,412$
$65,036 - 60,006 = 5030$	$60,045 + 2700 = 62,745$
$93,489 - 93,080 = 409$	$80,236 + 3040 = 83,276$
$20,406 + 3070 = 23,476$	$27,458 - 20,450 = 7008$
$51,080 + 903 = 51,983$	$78,678 - 8078 = 70,600$

### Day 1 Y6 Place value additions and subtractions Sheet 3

$430,000 + 6000 = 436,000$	$200,000 + 34,800 = 234,800$
$770,777 + 7000 = 777,777$	$744,522 - 522 = 744,000$
$600,233 - 200 = 600,033$	$645,005 - 64,000 = 5005$
$800,370 + 22,008 = 822,378$	$904,678 + 20,000 = 924,678$
$534,027 + 600 = 534,627$	$827,410 - 7000 = 820,410$
$272,896 - 72,000 = 200,896$	$852,462 - 2400 = 850,062$

#### Challenge

5174 books will still need shelving.

### Day 1 Y6 Place value additions and subtractions Sheet 4

$430,000 + 6378 = 436,378$	$805,370 + 20,007 = 825,377$
$234,000 + 846 = 234,846$	$904,678 + 20,000 = 924,678$
$770,777 + 7000 = 777,777$	$504,027 + 30,600 = 534,627$
$734,523 - 523 = 734,000$	$827,410 - 27,000 = 800,410$
$652,235 - 50,000 = 602,235$	$272,896 - 72,000 = 200,896$
$645,345 - 640,000 = 5345$	$852,462 - 50,402 = 802,060$

#### Challenge

45,470 items are not on display.

# Place Value

## Answers

### Day 2 Y5 Adding and subtracting 1, 10, 100, 1000 and 10,000 Sheet 1

$$\begin{aligned}44,444 + 1 &= 44,445 \\44,444 + 10 &= 44,454 \\44,444 + 100 &= 44,544 \\44,444 + 1000 &= 45,444 \\44,444 + 10,000 &= 54,444\end{aligned}$$

$$\begin{aligned}88,888 - 1 &= 88,887 \\88,888 - 10 &= 88,878 \\88,888 - 100 &= 88,788 \\88,888 - 1000 &= 87,888 \\88,888 - 10,000 &= 78,888\end{aligned}$$

$$\begin{aligned}34,872 + 10 &= 34,882 \\34,872 + 1000 &= 35,872 \\34,872 + 1 &= 34,873 \\34,872 + 100 &= 34,972 \\34,872 + 10,000 &= 44,872\end{aligned}$$

$$\begin{aligned}95,342 - 1 &= 95,341 \\95,342 - 100 &= 95,242 \\95,342 - 1000 &= 94,342 \\95,342 - 10,000 &= 85,342 \\95,342 - 10 &= 95,332\end{aligned}$$

### Day 2 Y5 Adding and subtracting 1s, 10s, 100s, 1000s and 10,000s Sheet 2

$$\begin{aligned}32,473 + 2 &= 32,475 \\32,473 + 20 &= 32,493 \\32,473 + 200 &= 32,673 \\32,473 + 2000 &= 34,473 \\32,473 + 20,000 &= 52,473\end{aligned}$$

$$\begin{aligned}97,657 - 4 &= 97,653 \\97,657 - 40 &= 97,617 \\97,657 - 400 &= 97,257 \\97,657 - 4000 &= 93,657 \\97,657 - 40,000 &= 57,657\end{aligned}$$

$$\begin{aligned}24,734 + 200 &= 24,934 \\24,734 + 50 &= 24,784 \\24,734 + 40,000 &= 64,734 \\24,734 + 3000 &= 27,734 \\24,734 + 5 &= 24,739\end{aligned}$$

$$\begin{aligned}85,346 - 30,000 &= 55,346 \\85,346 - 20 &= 85,326 \\85,346 - 4000 &= 81,346 \\85,346 - 200 &= 85,146 \\85,346 - 4 &= 85,342\end{aligned}$$

### Day 2 Y6 Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s Sheet 3

1.  $546,823 + 20,000 = 566,823$
2.  $728,281 - 5000 = 723,281$
3.  $238,134 = 238,194 - 60$
4.  $182,756 = 182,356 + 400$
5.  $428,390 + 500,000 = 928,390$
6.  $754,123 = 794,123 - 40,000$
7.  $421,329 + 70 = 421,399$
8.  $482,949 - 6 = 482,943$

# Place Value

## Answers

### Day 2 Y6 Adding and subtracting 1s, 10s, 100s, 1000s, 10,000s and 100,000s Sheet 4

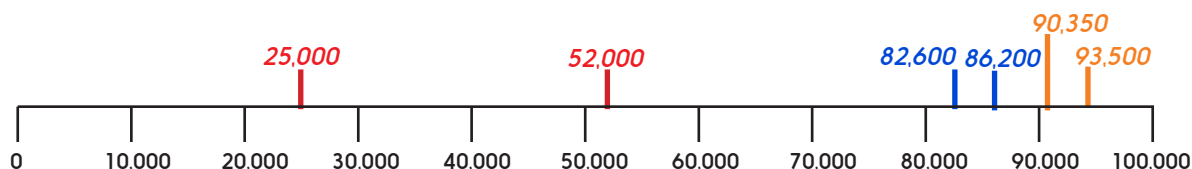
1.  $452,845 + 21,000 = 473,845$
2.  $874,246 - 3001 = 871,245$
3.  $178,121 = 378,123 - 200,002$
4.  $945,184 - 3200 = 941,984$
5.  $346,981 = 4200 + 342,781$
6.  $834,872 - 30,500 = 804,372$
7.  $962,378 - 500,200 = 462,178$
8.  $298,685 = 20,450 + 278,235$

### Day 3 Y5 Comparing 5-digit numbers Sheet 1

$$52,000 > 25,000$$

$$86,200 > 82,600$$

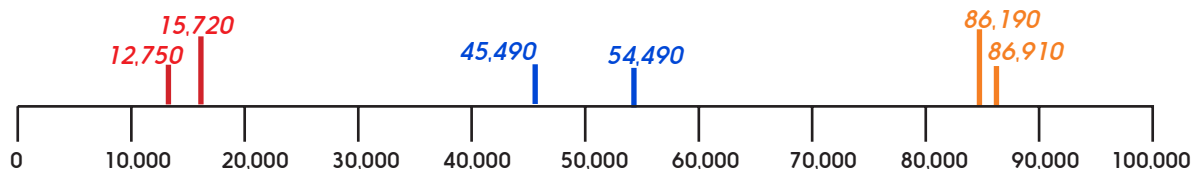
$$93,500 > 90,350$$



$$15,720 > 12,750$$

$$86,190 < 86,910$$

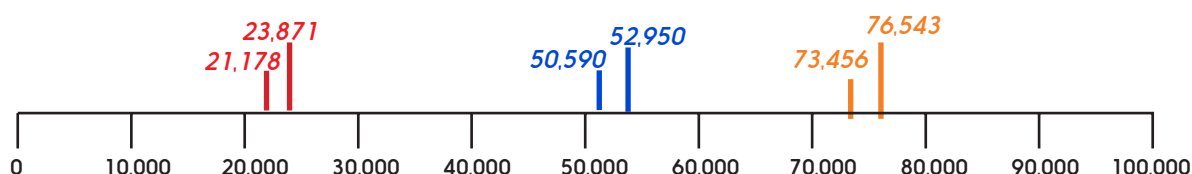
$$45,490 < 54,490$$



$$76,543 > 73,456$$

$$50,590 < 52,950$$

$$23,871 > 21,178$$



### Day 3 Y5 Ordering 5-digit numbers Sheet 2

Use the digits 1 to 5 to make at least three numbers between 20,000 and 40,000,

e.g. 23,145, 31,245, 35,214

Use the digits 1 to 5 to make at least three numbers between 15,000 and 25,000,

e.g. 15,234, 24,153, 23,415

Use the digits 1 to 5 to make at least three numbers between 40,000 and 45,000.

e.g. 43,251, 41,523, 42,135

Use the digits 1 to 5 to make one number as close to 50,000 as you can.

51,234

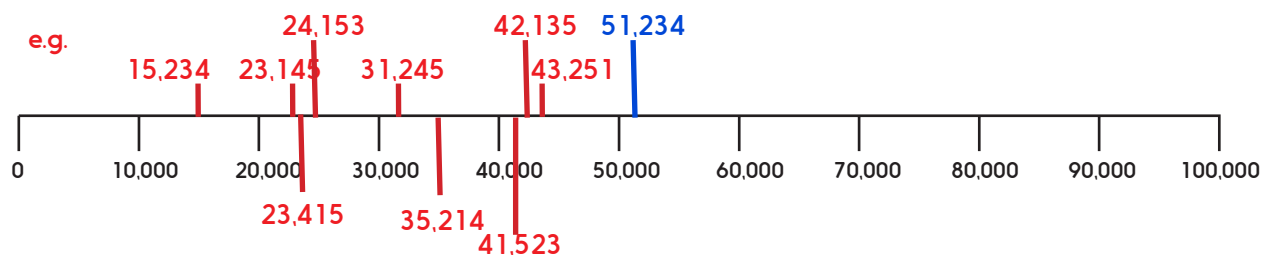


# Place Value

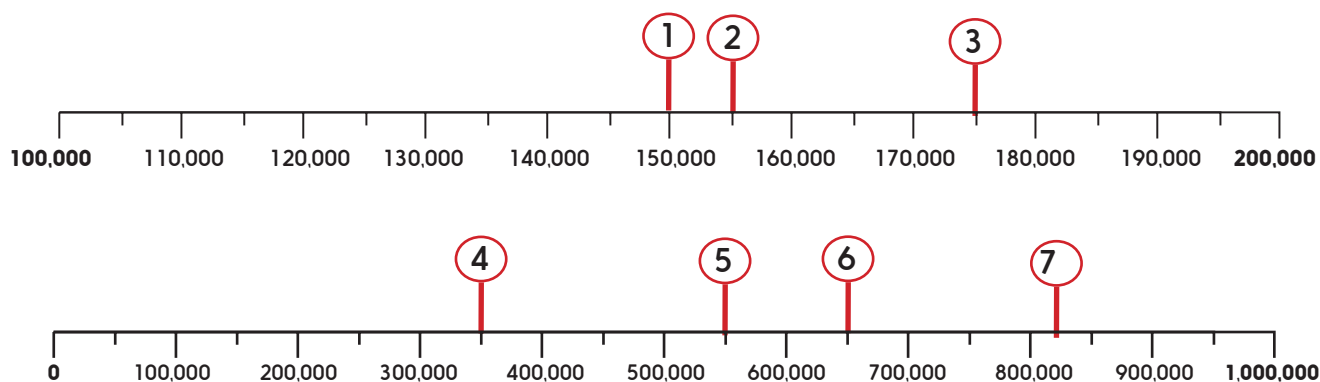
## Answers

### Day 3 Y5 Ordering 5-digit numbers Sheet 2 continued

e.g.



### Day 3 Y6 Comparing numbers up to a million Sheet 3

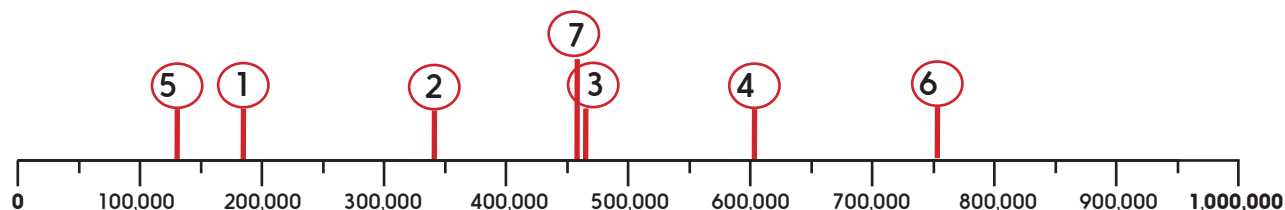


8.  $564,000 > 465,000$

9.  $129,876 < 213,000$

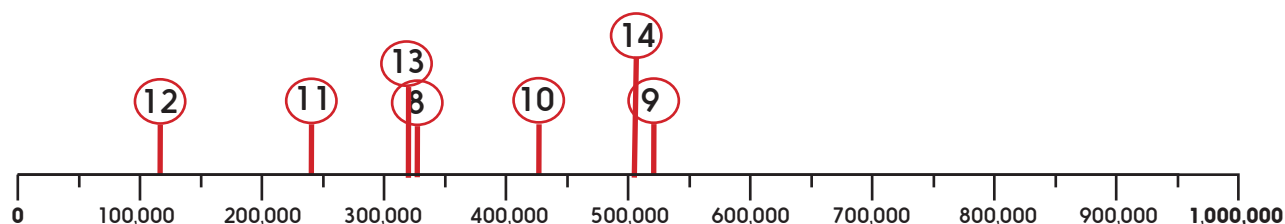
10.  $824,567 < 842,567$

### Day 3 Y6 Comparing numbers up to a million Sheet 4



Choose two populations. Write  $<$  or  $>$  between the two numbers.

e.g.  $751,000 > 466,500$



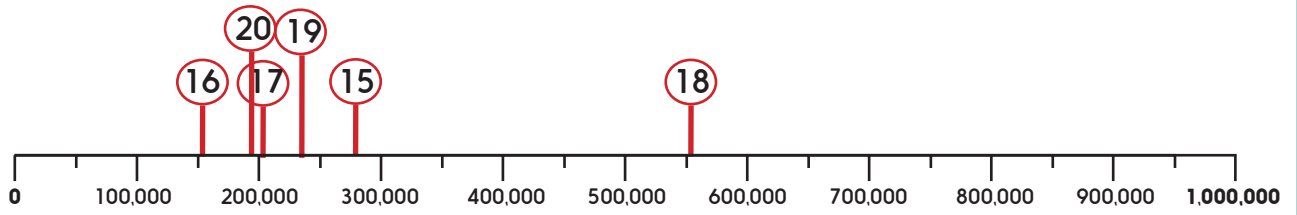
Choose two populations. Write  $<$  or  $>$  between the two numbers.

e.g.  $522,400 > 117,800$

# Place Value

## Answers

### Day 3 Y6 Comparing numbers up to a million Sheet 4 continued



#### Challenge

Choose two numbers on one of your lines. Write the number that comes half way between these. Be careful which two you choose - it makes a difference!  
e.g. **Belfast 333,900 and Manchester 503,100. 418,500 is halfway.**