# Comparing and Ordering Numbers Beyond 1000

I can compare and order numbers beyond 1000.

Comparing numbers to decide which are bigger and which are smaller requires a close look at the value of each digit. The best way to compare the size of numbers directly is to use a place value chart to inspect them. Consider the following set of numbers – **999, 1001, 1099, 9001, 10 001**

It could be possible to get mixed up when ordering these but with a place value chart there is no confusion – let's put the numbers into this place value chart:

| Ten Thousands | Thousands | Hundreds | Tens | Ones | |
|---|---|---|---|---|---|
| | | 9 | 9 | 9 | 999 |
| | 1 | 0 | 0 | 1 | 1001 |
| | 1 | 0 | 9 | 9 | 1099 |
| | 9 | 0 | 0 | 1 | 9001 |
| 1 | 0 | 0 | 0 | 1 | 10 001 |

As a digit is placed further to the left on the place value chart, its value increases. So when comparing how big numbers are, it is always worth starting at the left (largest) and moving to the right (smallest).

So when comparing, if a number has digits further to the left of the grid than the others, (10 001) then it is obviously the largest. However, if more than one number has a digit in the same column, then check to see which has the greatest value (this will be the bigger number).

If both numbers have same value digit in the same column then you keep looking to the right until you find a difference (1099 is bigger than 1001). Using this system will help to accurately order numbers from largest to smallest.

A. Write each of these numbers into the place value charts and then order them from highest to lowest. Cross them out when you have written them in to make your task easier.

1. 856     5001     4999     949     4959

| Ten Thousands | Thousands | Hundreds | Tens | Ones | Order from highest to lowest |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

2. 35 375     7357     735     5735     5573

| Ten Thousands | Thousands | Hundreds | Tens | Ones | Order from highest to lowest |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

B. Can you rewrite these numbers in order from highest to lowest? Sketch a place value chart on a whiteboard or on paper to help you if you need it.

1.    2632          6366          6332          999          1001

|  |  |  |  |  |
|---|---|---|---|---|
|  |  |  |  |  |

2.    9001          999          4526          10 001          1009

|  |  |  |  |  |
|---|---|---|---|---|
|  |  |  |  |  |

| 3. | 2828 | 8228 | 2882 | 20 820 | 8802 |
|----|------|------|------|--------|------|
|    |      |      |      |        |      |

| 4. | 6400 | 46 001 | 64 001 | 4600 | 6040 |
|----|------|--------|--------|------|------|
|    |      |        |        |      |      |

C. Compare the size of the following numbers and insert one of these symbols <> to make the number statement read correctly. Sketching a mini place value chart may help you with these. The first one has been done for you.

| 1. | 817 | > | 781 |
|----|-----|---|-----|
| 3. | 6205 |  | 6208 |
| 5. | 8574 |  | 7548 |
| 7. | 4274 |  | 7442 |
| 9. | 7891 |  | 7198 |
| 11. | 9999 |  | 10 000 |

| 2. | 1026 | < | 6021 |
|----|------|---|------|
| 4. | 1099 |  | 9011 |
| 6. | 3991 |  | 3919 |
| 8. | 1056 |  | 10 065 |
| 10. | 10 001 |  | 10 010 |
| 12. | 80 102 |  | 29 999 |

# Comparing and Ordering Numbers Beyond 1000 **Answers**

| question | answer |
|---|---|
| **A.** | |

**1**

| Ten Thousands | Thousands | Hundreds | Tens | Ones | | Order from high to low |
|---|---|---|---|---|---|---|
| | | 8 | 5 | 6 | | 5001 |
| | | 9 | 4 | 9 | | 4999 |
| | 4 | 9 | 5 | 9 | | 4959 |
| | 4 | 9 | 9 | 9 | | 949 |
| | 5 | 0 | 0 | 1 | | 856 |

**2**

| Ten Thousands | Thousands | Hundreds | Tens | Ones | | Order from high to low |
|---|---|---|---|---|---|---|
| | | 7 | 3 | 5 | | 35 375 |
| | 5 | 5 | 7 | 3 | | 7357 |
| | 5 | 7 | 3 | 5 | | 5735 |
| | 7 | 3 | 5 | 7 | | 5573 |
| 3 | 5 | 3 | 7 | 5 | | 735 |

**B.**

| | |
|---|---|
| 1 | 999, 1001, 2632, 6332, 6366 |
| 2 | 999, 1009, 4526, 9001, 10 001 |
| 3 | 2828, 2882, 8802, 8228, 20 820 |
| 4 | 4600, 6040, 6400, 46 001, 64 001 |

**C.**

| 1. | 817 | > | 781 | 2. | 1026 | < | 6021 |
|---|---|---|---|---|---|---|---|
| **3.** | 6205 | < | 6208 | **4.** | 1099 | < | 9011 |
| **5.** | 8574 | > | 7548 | **6.** | 3991 | > | 3919 |
| **7.** | 4274 | < | 7442 | **8.** | 1056 | < | 10 065 |
| **9.** | 7891 | > | 7198 | **10.** | 10 001 | < | 10 010 |
| **11.** | 9999 | < | 10 000 | **12.** | 80 102 | > | 29 999 |