Order and Compare Numbers

Aim: I can order and compare numbers.

1. Use the following symbols to compare the following numbers: <, = or >

    2783 ☐ 2873

    3041 ☐ 3014

    9377 ☐ 9773

2. Order the following sets of numbers from smallest to largest:
   3838, 3883, 8388, 8838, 3383

   6701, 6071, 1076, 1067, 7016

   9008, 8009, 908, 8090, 9080

3. Explain why 6581 > 6518.

   _____

   _____

4. Explain how to order the following numbers from smallest to greatest: 4514, 451, 4415, 1445, 4414.

   _____

   _____

   _____

   _____

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From a set of single-digit cards, deal four cards each. Use the cards to make a number.

   Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.

   Keep a record of your score.

   Write the numbers in your books with the relevant comparison symbol to keep a record.

2. Take it in turns to take four digit cards from a set.

   Make a four-digit number and place it in the following grid.

   Take it in turns to create a number. If a partner cannot put a number in the grid, the other player gains a point. Keep a record of your score.

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

Order and Compare Numbers

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1. Use the following symbols to compare the following numbers: <, = or >

    34 414 ☐ 34 144

    56 656 ☐ 56 655

    10 010 ☐ 11 010

2. Order the following sets of numbers from smallest to largest:
   72 727, 27 727, 27 277, 77 227, 72 272

   61 234, 61 423, 6432, 62 431, 62 143

   39 009, 30 090, 30 900, 39 090, 30 009

3. Explain why 78 632 > 78 362.

   _____

   _____

4. Explain how to order the following numbers from smallest to greatest: 87 878, 88 787, 88 887, 87 787, 78 778.

   _____

   _____

   _____

   _____

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From a set of single-digit cards, deal five cards each. Use the cards to make a number.

   Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.

   Keep a record of your score.

   Write the numbers in your books with the relevant comparison symbol to keep a record.

2. Take it in turns to take four digit cards from a set.

   Make a five-digit number and place it in the following grid.

   Take it in turns to create a number. If a partner cannot put a number in the grid, the other player gains a point. Keep a record of your score.

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

Order and Compare Numbers

Aim: I can order and compare numbers.

1. Use the following symbols to compare the following numbers: <, = or >

    676 767 ☐ 677 767

    100 010 ☐ 10 100

    782 391 ☐ 782 481

2. Order the following sets of numbers from smallest to largest:
    320 023, 302 023, 323 230, 302 203, 323 203

    110 011, 101 101, 10 101, 10 011, 101 001

    785 392, 857 392, 587 392, 578 392, 758 392

3. Explain why 382 562 > 380 652.

    _____

    _____

4. Explain how to order the following numbers from smallest to greatest: 656 566, 665 656, 665 565, 655 556, 565 665.

    _____

    _____

    _____

    _____

Order and Compare Numbers

Aim: I can order and compare numbers.

A set of single-digit cards is required for these tasks.

Work with a partner, checking your work together.

Compare

1. From two sets of single-digit cards, deal six cards each. Use the cards to make a number.

   Toss a coin. If the coin lands on heads, the greater number wins a point. If the coin lands on tails, the smaller number wins a point.

   Keep a record of your score.

Order

2. Take it in turns to take six digit cards from a set.

   Make a six-digit number and place it in the following grid.

   Take it in turns to create a number. If a partner cannot put a number in the grid the other player gains a point. Keep a record of your score.

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

smallest   greatest

Order and Compare Numbers

Aim: I can order and compare numbers.

Work with a partner, checking your work together.

Compare

1. Each partner writes a number on a small whiteboard or piece of paper, hidden from their partner. Each partner can ask, in turn, three questions of their partner, with yes or no answers. They then estimate whether their number is smaller or greater than their partner's number.

   Keep a record of your score.

   Write the numbers in your books with the relevant comparison symbol to keep a record.

Order

2. Cut out six small pieces of paper to fit the grid below. The activity is done without talking.

   Each partner writes three numbers on a piece of paper, hidden from their partner. Take it in turns to place the numbers on the grid, keeping the numbers on the grid in order from smallest to greatest. If a partner cannot place one of their numbers, they can move an existing number on the grid instead.

   The aim is to place all the numbers on the grid in the least amount of turns possible.

smallest   greatest

Order and Compare Numbers Answers

Lower Ability

1. 2783<2873

   3041>3014

   9377<9773

2.

3383	3838	3883	8388	8838

1067	1076	6071	6701	7016

908	8009	8090	9008	9080

3. Both 6581 and 6518 have six thousands and five hundreds. However, 6581 has eight tens, which is more than the one ten in 6518, so 6581 is greater than 6518.

4. All the numbers have four digits except 451, which only has three, or has no thousands, so is the smallest.

   1445 only has one thousand, so is smaller than the other three remaining numbers, which all have four thousands.

   The next largest numbers are 4414 and 4415, which have four hundreds, as the other, 4514, has five hundreds. 4414 and 4415 are consecutive numbers with 4414 the smaller as it has four ones and 4415 has five ones.

   This leaves 4514 as the largest number. The order is: 451, 1445, 4414, 4415, 4514.

Middle Ability

1. 34 414>34 144

   56 656>56 655

   10 010<11 010

2.

27 277	27 727	72 272	72 727	77 227

6432	61 234	61 423	62 143	62 431

30 009	30 090	30 900	39 009	39 090

3. Both 78 632 and 78 362 have seven ten thousands and eight thousands. However 78 632 has six hundreds, which is more than the three hundreds in 78 362, so 78 632 is greater than 78 362.

4. All the numbers have five digits. However, all have eight ten thousands except 78 778, which only has seven ten thousands so is the smallest number.

   The two numbers 87 878 and 87 787 have seven thousands, so they are the next numbers in the sequence as the other numbers have eight thousands. 87 787 is smaller than 87 878 because is has seven hundreds compared to eight hundreds.

   Of the final two numbers, 88 787 and 88 878, 88 787 is smaller as it has seven hundreds, which is less than the eight hundreds in 88 878.

   The order is: 78 778, 87 787, 87 878, 88 787, 88 878.

Order and Compare Numbers Answers

Higher Ability

1. 676 767 < 677 767
   100 010 > 10 100
   782 391 < 782 481

2.

302 023	302 203	320 023	323 203	323 230

10 011	10 101	101 001	101 101	110 011

578 392	587 392	758 392	785 392	857 392

3. Both 382 562 and 380 652 have three hundred thousands and eight ten thousands. However 382 562 has two thousands, which is more than the 0 thousands in 380 652, so 382 562 is greater than 380 652.

4. All the numbers have six hundred thousands except 565 665, so this is the smallest.

   Next, looking at the ten thousands, 655 556 and 656 566 have five ten thousand, whereas the other numbers have six ten thousands. The five thousands in 655 556 make it smaller than 656 566.

   Finally 665 656 and 665 565 both have five thousands, but 665 565 has five hundreds, which is less than the six hundreds in 665 656.

   The order is: 565 665, 655 556, 656 566, 665 565, 665 656.