



© Can I talk about the value of digits in numbers up to 8 digits?

## Number Names Game 1

Sanjay has the number  
208,648. He adds 7,000 to  
it.

What is the value of  
the thousands digit after  
he has done this?

What do you notice?

Why has this happened?

Partition the numbers  
below as many different  
ways as you can.

35,450

128,378

334,220

85,780

605,201

### Always, Sometimes, Never?

If a number has 4 digits,  
it will be in the thousands,  
and if it has 5 digits, it will  
be in the tens of thousands.

Explain your answer and  
prove it!

What is the same and  
what is different about the  
numbers below?

345,658

2,862,365

43,777

101,101

Will is working out the  
number that is five  
hundred less than one  
million.

He says his answer has  
a zero in the hundreds of  
thousands column.

Is he right?

Explain your answer.



🎯 Can I talk about the value of digits in numbers up to 8 digits?

## Number Names Game 2

James says, "If a number has 4 digits, it will be in the thousands, and if it has 5 digits, it will be in the tens of thousands."

What do you think about that statement?

Explain your answer.

Find the difference between the place value of the 8s in these numbers.

80,708

866,821

508,800

8,080,000

Calculate the missing numbers below...

$$72040 + ? = 74449$$

$$309901 + ? = 319931$$

$$900063 + ? = 907763$$

$$1371238 + ? = 1001038$$

$$500009 + ? = 509099$$

Using the digits below, create a number that contains 6 to 8 digits.

2, 2, 4, 5, 5, 6, 7, 9

Can a friend work out your number by asking questions where you can only respond 'Yes' or 'No'?

Using the digits 1 to 9, write down as many different 7-digit numbers as you can in ascending order in three minutes.

How many did you find?

How many numbers could you create if you had more time?



© Can I talk about the value of digits in numbers up to 8 digits?

## Number Names Game 3

How many digits would you expect the following to have? Give reasons for your answers.

- A footballer's salary
- A new car
- A house
- Sales of an album

Find the product of the values of the 7s and 8s in these numbers...

854,742

1,677,408

208,765

7,303,821

77,008

I am thinking of an 8-digit number that contains four zeros.

What is the smallest number I could be thinking of?

What is the greatest number I could be thinking of?

**Always, Sometimes, Never?**

Mark says that to find the midway point between numbers of any size, you must find the total of the two numbers and then divide the answer by 2.

\_\_\_\_\_ < \_\_\_\_\_  
> \_\_\_\_\_

Create three 8-digit numbers using the digits below to make this statement true.

0, 1, 2, 3, 5, 7, 8, 9

The digits can be used once in each number and must never be in the same position in more than one number.