

10/06/2020

WALT use given digits to solve problems.

WILF:

- Use your place value columns.
 - Re-arrange digits to solve problems
 - Practise rounding to create the smallest and largest numbers possible.



Today you will be using given digits to solve problems.

I would like you to use your place value columns to help you.



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

--	--	--	--	--	--

Here are six digits. We are going to find the smallest and largest number possible.



0

1

8

9

5

2

To find the largest number,
you need the largest numbers
to the left.

To find the smallest number,
you need the smallest numbers
to the left.

Have a go!

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Here are six digits. We are going to find the smallest and largest number possible.



0 1 8 9 5 2

Largest:

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	8	5	2	1	0

Here are six digits. We are going to find the smallest and largest number possible.



0

1

8

9

5

2

Smallest:

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
0	1	2	5	8	9

If I asked you to make a number that rounds to 180,000?



0

1

8

9

5

2

Here, you need to think about your rounding. The numbers each need to round down where possible, to reach the smallest number.

Remember your rounding rules - if it's closer than the half way point to ten, it goes up, below (4 and under) goes down.

Have a go. 😊

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

What is the smallest possible number that rounds to 180,000?



0 1 8 9 5 2

Here is the answer:

If you were rounding up, what could you do?

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1	8	0	2	5	9

The most important thing is to read the question carefully, then think about where each digit can be placed in place value columns to reach the number asked for.

Try to give a reason for each of your choices - example:
This is the largest odd number because the ones digit is odd, and x is the smallest number that could be placed in the x column.



Please challenge yourself. You can use up to 7 digits (million) if you like.

Using these strategies, please try today's activity. ☺

You have two sets of the digits from 0 to 9.

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

The idea is to arrange these digits in the five boxes to make four-digit numbers as close to the target number as possible.
You may use each digit once only.

	largest odd number
	largest even number
	largest multiple of 3
	smallest multiple of 5
	number closest to 5000