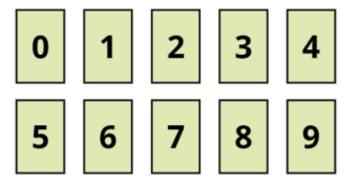
## Reasoning - Red Chilli



Use the digit cards to make three different 5-digit numbers that match the clues.



- The digit in the ones column and the digit in the hundreds column have a difference of 2
- The digit in the hundreds column and the digit in the ten-thousands column have a difference of 2
- The sum of all the digits in the number is 19

Mo is thinking of a number.

- The number is 5,000 when rounded to the nearest 1,000
- The number is also 5,000 when rounded to the nearest 100
- The number is also 5,000 when rounded to the nearest 10
- The number is not 5,000

What is the greatest possible value of the number?

Jack has got some place value counters.

Some of my
counters have a value
of 1,000,000, some
have a value of 10,000
and some have a
value of 1



Jack picks four counters.

What different numbers greater than 1,000,000 could he make?

Jack wants to make a number greater than 5,000,000

What is the fewest number of counters he needs?

Four children each have one of these cards.

15,987

15,813

15,101

16,101

Each child gives a clue about the number on their card.

Filip says, "My number rounds to 16,000 to the nearest thousand."

Esther says, "My number has 1 hundred."

Jack says, "My number is 15,990 when rounded to the nearest ten."

Dora says, "My number is 15,000 when rounded to the nearest thousand."

Match the cards to the children.

## Cofia to prove it with working out:

Are the statements true or false?

Adding ten thousand to a number only ever changes the digits in exactly one column.

The number consisting of 70 thousands and 400 ones is 700,400

3 ten-thousands is the same as 30 thousands.

400 hundreds is the same as 4 ten-thousands.

A large number added to a large number is always a large number.

A large number subtracted from a large number is always a large number.

Use some of the digit cards and the clues to work out the number.

0

3

3

5

5

6

7

- The ten-thousands and hundreds columns have the same digit.
- The hundred-thousands digit is double the tens digit.
- The number has six digits.
- The number is less than six hundred and fifty-five thousand.

Find as many possible solutions, giving your answers in words and numerals.