# Maths Mastery Counting in Powers of 10 



## Counting in 10s

Nura counts forwards and backwards in 10s from 29. Which numbers could Nura count as she does this?
3579 8923 ..... $-29$ ..... -201
10899 307819 270009 ..... 999999
58991 -999 3972 ..... -29 831

Write three more numbers she would count.
Any positive number ending in 9 or negative number ending in 1.

## Counting in 100s

Count forwards in hundreds from these numbers. What are the second and fifth numbers that you arrive at?

| Number | Second | Fifth | Second <br> (Backwards) | Fifth <br> (Backwards) |
| :---: | :---: | :---: | :---: | :---: |
| 289 | 489 | 789 | 89 | -211 |
| 891 | 1091 | 1391 | 691 | 391 |
| 19034 | 19234 | 19534 | 18834 | 18534 |
| 99607 | 99807 | 100107 | 99407 | 99107 |
| 610729 | 610929 | 611229 | 610529 | 610229 |

Try this with some numbers of your own, maybe starting with a negative number.

## Counting in 1000s

Any number ending 819.
Counting in thousands from 34 819:

- The hundreds, tens and ones will stay as 819.
- The whole number of thousands can be any number (e.g. there are 34 thousands in 34819 ) so the thousands, ten thousands, hundred thousands etc. can be any number.

Counting backwards the hundreds, tens and ones will change to 181 when negative.


## Counting in 10 000s

Keziah counts forwards in ten thousands. Write the next three numbers from these:

| Number | 1st | 2nd | 3rd |
| :---: | :---: | :---: | :---: |
| 45901 | 55901 | 65901 | 75901 |
| 193619 | 203619 | 213619 | 223619 |
| 10720 | 20720 | 30720 | 40720 |
| 287718 | 297718 | 307718 | 317718 |
| 519374 | 529374 | 539374 | 549374 |

Give a partner some numbers to count forwards and backwards from in 10000 s .
10720 will become negative on the second count backwards.

## Counting in 100 000s

Ruben counts forwards in hundred thousands. How many times will he count from these numbers to pass one million?

| Number | Counts |
| :---: | :---: |
| 249001 | 8 |
| 482904 | 6 |
| 717566 | 3 |
| 572599 | 5 |
| 833224 | 2 |

Try some numbers of your own. Is there a pattern?

