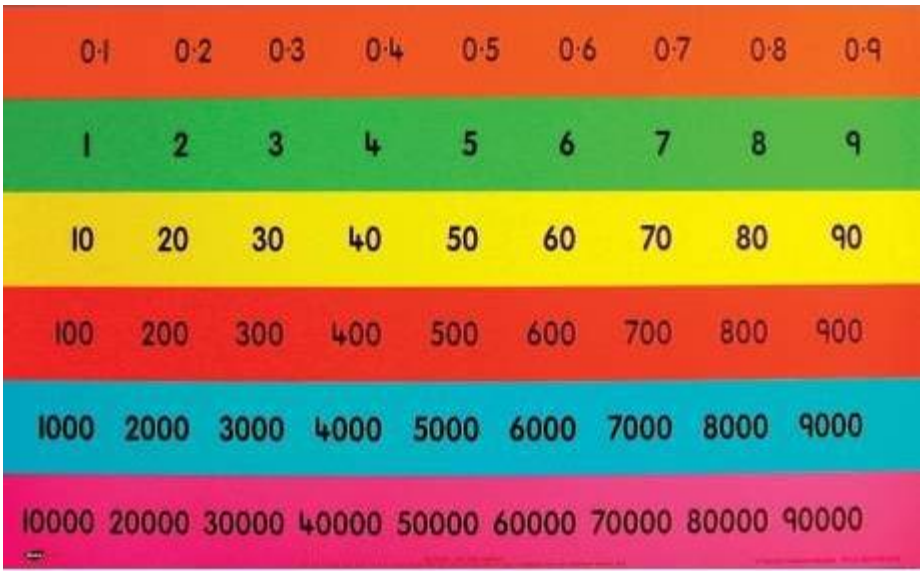
faCounting in powers of 10 – watch the clip first

https://www.youtube.com/watch?v=EdLdszAduwE



Make yourself a set of cards like this

+10	+100	+1000	+10,000
-10	-100	-1000	- 10,000

Pick one number from each row of the place value chart above

e.g. 60.000, 2000, 300, 30 + 5 = 62,335

Then pick a card

Write the next 3 numbers in the sequence

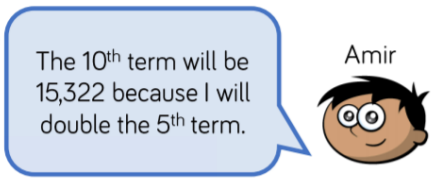
e.g If I picked +100, my numbers would be

62,**3**35, 62,**4**35, 62,**5**35, 62,**6**25

Complete 4 sequences

2. Amir writes the first five numbers of a sequence.

They are
3,666, 4,666, 5,666, 6,666, 7,666



Is he correct?
Explain why.

3. Starting at -507, count forwards using a power of 10 through the maze for a total of 12 terms.

What number did you reach?

-507	493	1,493	493	–493
507	1,507	2,493	1,493	1,493
1,507	2,507	3,493	2,493	2,493
2,507	5,493	4,493	3,493	12,493
3,507	6,493	5,493	4,493	11,493
4,507	7,493	8,493	9,493	10,493

2. Use the digit cards below to create a five-digit number.

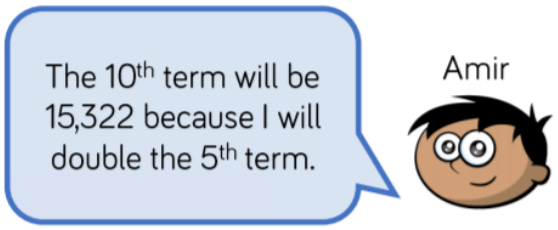
Counting forwards or backwards in 10s, 100s or 1,000s, investigate the closest you can get to 50,000 in the fewest terms.

ANSWERS

1. Various answers

2. Amir writes the first five numbers of a sequence.

They are
3,666, 4,666, 5,666, 6,666, 7,666



Is he correct?
Explain why.

The 10th term is 12,666 because Amir is adding 1,000 each time. He should have added 5,000 not doubled the 5th term.

3. Count forwards in 1,000s. Reach 12,493.

-507	493	1,493	493	–493
507	1,507	2,493	1,493	1,493
1,507	2,507	3,493	2,493	2,493
2,507	5,493	4,493	3,493	12,493
3,507	6,493	5,493	4,493	11,493
4,507	7,493	8,493	9,493	10,493

4. **Counting forwards or backwards in 10s, 100s or 1,000s, investigate the closest you can get to 50,000 in the fewest terms.**
Various answers, for example: 9 terms. 49,652 + 100 + 100 + 100 + 10 + 10 + 10 + 10 + 10 + 10 = 50,012