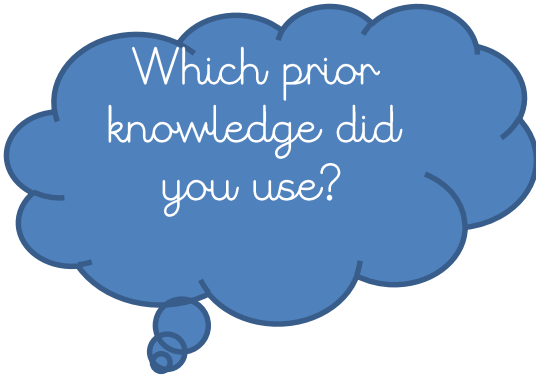


Linked to your previous learning:

1. Count in six steps of 10 from 4

2. Count back four steps of 100 from 1,001

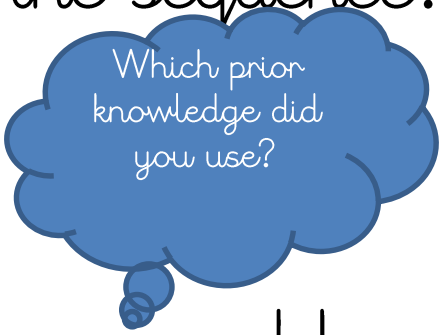
WALT: Count forwards and backwards in steps of powers of 10

Introduction

2, ……., 22, 32, ……., ……., 62

What are the missing numbers in the sequence?

How did you work this out?



Can you think of any times when you would use this knowledge in real-life situations?

Key Vocabulary

- Digit
- Ones
- Ten
- Hundred
- Thousand
- Million
- Smallest
- Largest
- Ordered
- Count on
- Add on
- Count back
- Sequence

Use the class maths display and your table top resource pack to generate your own examples of key vocabulary too.

Fluency – Do it!

1) Count on in 10s from 146

146, ____ , ____, ____,_____,_____,_____

2) Count back in 10s from 239

239, ____ , ____, ____,_____,_____

3) Count on in 100s from 5235

5235, ____ , ____, ____,_____,_____

4) Count on 6 100s from 23,459

5) Count back 7 1,000s from 324,311

6) Count on 5 10,000 from 674,234

Fluency – Do it! ANSWERS

1) 146, 156 , 166, 176, 186, 196, 206

2) 239, 229 , 219, 209, 199, 189

3) Count on in 100s from 5235

5235, 5335 , 5435, 5535, 5635, 5735

4) 23,459, 23,559, 23,659, 23,759, 23,859, 23,959, 24,059

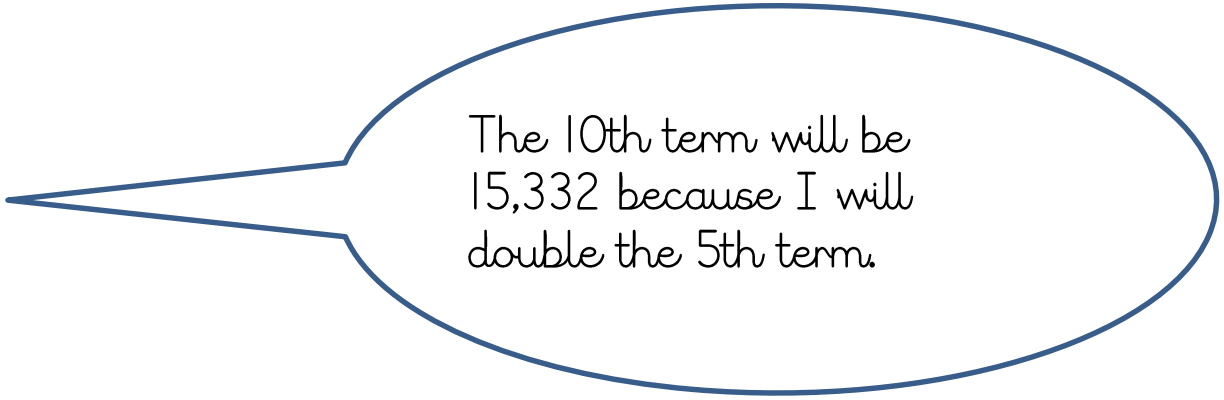
5) 324,311, 323,311, 322,311, 321,311, 320,311, 329,311, 328,311, 317,311

6) 674,234, 684,234, 694,234, 704,234, 714,234, 724,234

Reasoning – Secure it!

Daniel writes the first five numbers of a sequence.
They are
3,666, 4,666, 5,666, 6,666, 7,666

He says:



Is Daniel correct? Use your Maths Sentence Starters to explain your reasoning:
E.g. Because,,, I already know.... Using this knowledge...
Once I found this out...

** Highlight sentence starters in green and key vocabulary in yellow.

Reasoning – Secure it! Answer

Daniel is incorrect.

The correct answer would be 12,666 because the rule is to add 1,000 each time.
To calculate the answer correctly, he should have added 5,000 and not doubled the 5th term.

Reasoning 2 – Secure it!

Isabel counts forward and backwards in steps of 10 from 3642. Which of these numbers will Isabel say as she counts?

14,742	364	642	-2
7,640	12	-8	64
8,512	23,758	36,420	902

Explain how you know which numbers she will count.

Reasoning 2 – Secure it! ANSWERS

She won't count the following numbers as the one digit isn't a 2: 364, 7,640, 23,758, 64, 36,420

She will count: 14,742, 642, -8, 12, 8,512 and 902

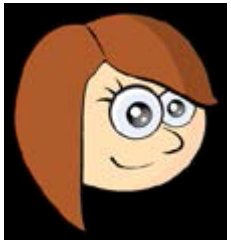
She will count: -8 because 2 -10 is -8

Problem solving - Deepen it!

Max

I am counting in 10s
from 184
I will include 224

I am counting in 100s
from 604
I will include 1,040



Ella

I am counting in 1,000s
from 13
I will include 130,000

Who is right and who is wrong?
Use your maths sentence starters to explain how you know this and correct any mistakes that they have made

Use your Maths Sentence Starters in your explanation:
** Highlight sentence starters in green and key vocabulary in yellow.

Problem solving – Deepen it! Answers

Ella has made a mistake. She is counting in 100s therefore the ones column should never change.

Henry has also made a mistake as he is counting thousands so the tens and ones column won't change.

Plenary

Identify the mistake in each sequence and correct it.

7,875, 8,875, 9,875, 11,875, 12,875, 13,875.....
864,664, 764,664, 664,664, 554,664, 444,664....