Puzzle: March 2024

In 2006 at the UKMT's 10 year anniversary Dr Peter Neumann wrote some integers on the board.

1	2	3	4	5	---
1	3	4	7	11	---
0	1	-	-	-	---

Peter then asked the audience what the third term in the third row was. Most of the audience correctly said 1. He then asked what the fourth term in the third row was. Most of the audience correctly said 3. Peter then asked what the fifth term in the third row was. Most of the audience *incorrectly* said 6 rather than the correct answer of 1.

Find the first 19 numbers in each row.

Hint: Primes.

You are reminded that calculators are forbidden by the UKMT.

The names of those sending answers to volunteering@ukmt.org.uk by 30th April will appear in the next Volunteers Newsletter.

Peter started the UKMT in 1996.

Thanks for everything Peter.

Puzzle: December 2023 Answers:

$$27^3 + 36^3 + 45^3 = 6^3 + 36^3 + 48^3 = 12^3 + 19^3 + 53^3 = 54^3.$$

Answers from;

Tony CPatricia K Kavin W