

Napier's Bones

Age 7 to 11

The Scot, John Napier, invented these strips (originally made from bone) about 400 years ago to help calculate multiplication and division.

This is what they looked like:

1. The numbers 0-9 are written at the tops of the nine columns in a square

	0	1	2	3	4	5	6	7	8	9
2		2	4	6	8	10	12	14	16	18
3		3	6	9	12	15	18	21	24	27
4		4	8	12	16	20	24	28	32	36
5		5	10	15	20	25	30	35	40	45
6		6	12	18	24	30	36	42	48	54
7		7	14	21	28	35	42	49	56	63
8		8	16	24	32	40	48	56	64	72
9		9	18	27	36	45	54	63	72	81

2. Diagonal lines split each square in half

3. The numbers 2-9 are written down the left side

4. The numbers at the top are multiplied by each number on the left

The units of the answer are written in the bottom corner

The tens are written in the top corner

Can you work out how to use Napier's bones to find the answer to 24×6 ?
 How about 461×4 ?
 Now try 8931×6 .

Can you work out how you would use them to calculate the product of 3541 and 768 ?