

Walk like an Egyptian? Count like a Computer!

1. Split decimal numbers into *thousands, hundreds, tens and units*, lay out as shown (just copy the first one):

1. 3029	->	th	h	t	u			
		3	1	2	9	3×1000	$= 3000$	
						0×100	$= 0$	
						2×10	$= 20$	
						9×1	$= 9 +$	

								3129

2. 643 ->

3. 43876 ->

2. In decimal numbers, the places are called *thousands, hundreds, tens and units* and so on. How many times bigger is the value of the *thousands* place compared to the *hundreds* place? Answer in a short sentence.
3. In decimal numbers how much bigger is the value of each place, compared to the smaller one before it? Answer in a short sentence.
4. What are the ten decimal digits? Write a short sentence listing the digits.
5. In binary numbers, what are the only two binary digits? Answer in a short sentence.
6. Split these *binary* numbers up into *8s, 4s, 2s* and *units (1s)*, layout each one as shown.

1. 1011









2. 1001

3. 0101

4. 0011

5. 1111

Early Egyptian

				
1	10	100	1000	10,000
100,000	1,000,000	2004		
				

7. Work out the first eight place values in binary, all the way up to the 256s place.

256s	___s	__s	32s	___s	8s	4s	2s	1s
	1	1	0	1	1	1	1	
						$1 \times 32 = 32$		
						$1 \times 16 = 16$		
						$0 \times 8 = 0$		
						$1 \times 4 = 4$		
						$1 \times 2 = 2$		
						$1 \times 1 = 1 +$		

								53

1. 101111

2. 010101

3. 101010

