

chapter 2.5:

converting binary numbers

Here is one of the quicker ways to convert numbers from the numbers you're used to (base 10) to binary numbers!

You'll have 2 columns of numbers which you can label Left and Right (and one column of scratchwork). Here are the steps:

1. Put the number you are converting in the L column.
2. Divide that number by 2. Put the remainder of the division in the R column. Put the answer of the division in next row of the L column, excluding the remainder.
3. Keep going until both the L column and R column entries equal 1.

excerpt from BubbleSort Zines

<u>L</u>	<u>R</u>		
18	0	$2 \overline{) 18}^9$	R0
9	1	$2 \overline{) 9}^4$	R1
4	0	$2 \overline{) 4}^2$	R0
2	0	$2 \overline{) 2}^1$	R0
1	1	$2 \overline{) 1}^0$	R1

The binary representation of the number is the R column, read from the bottom up!

So 18 in binary is 10010! You can write 18 with just 5 candles!

excerpt from BubbleSort Zines