

## Binary Numbers

What kind of patterns do you see when counting in binary code?

### DECIMAL    BINARY

0	000000
1	000001
2	000010
3	000011
4	000100
5	000101
6	000110
7	000111
8	001000
9	001001
10	001010
11	001011
12	001100
13	001101
14	001110
15	001111
16	010000
17	010001
18	010010
19	010011
20	010100
21	010101
22	010110
23	010111
24	011000
25	011001
26	011010
27	011011
28	011100
29	011101
30	011110
31	011111

You can use binary code to transmit messages even without the internet. Give it a try. If we assign a letter for every number of the alphabet, you can send silent messages in code using the binary-dot cards.

Write out a short message and use the decimal number in the following key to translate the message to binary code (A = decimal 1 = binary 000001).

**DECIMAL    LETTER**

1	A
2	B
3	C
4	D
5	E
6	F
7	G
8	H
9	I
10	J
11	K
12	L
13	M
14	N
15	O
16	P
17	Q
18	R
19	S
20	T
21	U
22	V
23	W
24	X
25	Y
26	Z