

Binary alphabet chart

Every letter in 8-bit binary (ASCII). Capitals are 65-90, lowercase 97-122.

Uppercase	Binary	Dec	Lowercase	Binary	Dec
A	01000001	65	a	01100001	97
B	01000010	66	b	01100010	98
C	01000011	67	c	01100011	99
D	01000100	68	d	01100100	100
E	01000101	69	e	01100101	101
F	01000110	70	f	01100110	102
G	01000111	71	g	01100111	103
H	01001000	72	h	01101000	104
I	01001001	73	i	01101001	105
J	01001010	74	j	01101010	106
K	01001011	75	k	01101011	107
L	01001100	76	l	01101100	108
M	01001101	77	m	01101101	109
N	01001110	78	n	01101110	110
O	01001111	79	o	01101111	111
P	01010000	80	p	01110000	112
Q	01010001	81	q	01110001	113
R	01010010	82	r	01110010	114
S	01010011	83	s	01110011	115
T	01010100	84	t	01110100	116
U	01010101	85	u	01110101	117
V	01010110	86	v	01110110	118
W	01010111	87	w	01110111	119
X	01011000	88	x	01111000	120
Y	01011001	89	y	01111001	121
Z	01011010	90	z	01111010	122

Practise: binary letters

Use the chart on page 1. Answers are on page 3.

1. Decode these five words

a) 01001000 01001001

b) 01000011 01000001 01010100

c) 01010011 01010101 01001110

d) 01000011 01001111 01000100 01000101

e) 01000010 01011001 01010100 01000101

2. Write your name in binary

Capital first letter, lowercase after. One 8-digit byte per letter.

Name: _____

3. Circle the bit that changes between A and a

A 0 1 0 0 0 0 0 1

a 0 1 1 0 0 0 0 1

Which place value does that bit stand for? _____

Answer key

Check your work.

1. The five words

- | | |
|--|------|
| a) 01001000 01001001 | HI |
| b) 01000011 01000001 01010100 | CAT |
| c) 01010011 01010101 01001110 | SUN |
| d) 01000011 01001111 01000100 01000101 | CODE |
| e) 01000010 01011001 01010100 01000101 | BYTE |

2. Your name

Example: Mia = 01001101 01101001 01100001

3. The bit that changes

The third digit from the left: 0 in A, 1 in a. It stands for 32, so every lowercase letter is its capital + 32 (A = 65, a = 97).