## Binary

## Capital Letters, Lowercase Letters, And Numbers

## includes



binary code activity ideas

## Thank You!

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- Claire \& Natasha, The Vivify Team


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## ABOUT THESE ACTIVITIES

The following page is a reference sheet to be used when learning binary and completing related activities. Below is a list of suggested activities for kids using binary!

## Binary activities:

1. Make a necklace that spells out your name or a message in binary. Requires string and 3 colors of beads (one color for "0", another for " 1 " and another to separate letters)
2. Write coded messages to a friend in binary.
3. Write words or your name in binary using Legos
4. Make a clock with binary numbers
5. Make a picture on graphing paper by writing a phrase in binary (stacking the words on top of each other) and coloring in either just the "O's" or just the "1's"
6. Make a Christmas tree ornament out of beads and pipe cleaners that spells something in binary.
7. Make a flag using strips of paper as horizontal stripes. Each strip of paper will represent one letter in your name or state/country. Draw squares on each strip and color a square for "0" and another color for "1". Stack your strips (letters) to vertically spell your word. Attach your word to a stick and display your flag!
8. Make a song by spelling out a short word in binary with clapping for "0" and stomping for "1"
9. Make a name tag for your desk or bedroom door using the binary alphabet and art supplies
10. Make a paper flower that spells out "love" in binary. Cut out 4 circles (one for each letter) of decreasing sizes and divide them into 8 slices each. Color each slice one color for "0" and another for "1". Poke a hole in the center of each circle. Stack them biggest to smallest and slide them onto a green pipe cleaner "stem".


## BINARY ALPHABET \& NUMBERS

CAPITAL LETTERS

| A | 01000001 |
| :--- | :--- |
| B | 01000010 |
| C | 01000011 |
| D | 01000100 |
| E | 01000101 |
| F | 01000110 |
| G | 01000111 |
| H | 01001000 |
| I | 01001001 |
| J | 01001010 |
| K | 01001011 |
| L | 01001100 |
| M | 01001101 |
| N | 01001110 |
| O | 01001111 |
| P | 01010000 |
| Q | 01010001 |
| R | 01010010 |
| S | 01010011 |
| T | 01010100 |
| U | 01010101 |
| V | 01010110 |
| W | 01010111 |
| X | 01011000 |
| Y | 01011001 |
| Z | 01011010 |

LOWER CASE LETTERS
a
b
c
d
e
f
g
h
i
j
k
l
m
n
0
p
q
s
t
u
v
w
x
y
Z

01100001
01100010
01100011
01100100
01100101
01100110
01100111
01101000
01101001
01101010
01101011
01101100
01101101
01101110
01101111
01110000
01110001
01110010
01110011
01110100
01110101
01110110
01110111
0111100050
01111001
01111010

NUMBERS

| 0 | 0 |
| :--- | :--- |
| 1 | 1 |
| 2 | 10 |
| 3 | 11 |
| 4 | 100 |
| 5 | 101 |
| 6 | 110 |
| 7 | 111 |
| 8 | 1000 |
| 9 | 1001 |
| 10 | 1010 |
| 11 | 1011 |
| 12 | 1100 |
| 13 | 1101 |
| 14 | 1110 |
| 15 | 1111 |

20
10100

11001

11110

110010

1100100

