



The Woodson Project Presents: Binary Code

Kimberly Bryant was born in Memphis, Tennessee and is an electrical engineer. She is the founder of Black Girls Code, a nonprofit that aims to introduce coding skills to Black girls and teens, and to promote ongoing training in this field.

What is binary code?

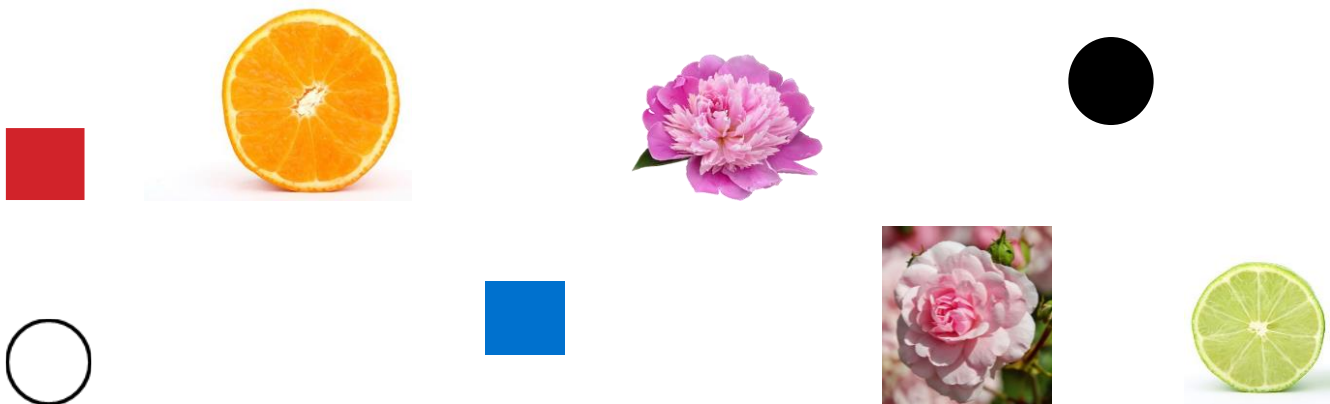
It is how devices can complete work! A computer works using electricity. An off signal is a 0, an on signal is a 1. That is binary code, a series of 0s and 1s, which all translate into letters, symbols, or operations for the computer to perform. Use the code below to see what the blanks spell out! (Once you finish that, you can make up your own phrases and use the code for others to spell them out.)

For ages 9-12.

Character	Binary Code	Character	Binary Code	Character	Binary Code
A	01000001	J	01001010	S	01010011
B	01000010	K	01001011	T	01010100
C	01000011	L	01001100	U	01010101
D	01000100	M	01001101	V	01010110
E	01000101	N	01001110	W	01010111
F	01000110	O	01001111	X	01011000
G	01000111	P	01010000	Y	01011001
H	01001000	Q	01010001	Z	01011010
I	01001001	R	01010010	!	00100001

01001110 01000101 01010111 01011001 01001111 01010010 01001011 00100001

Binary code doesn't just have to be 0s and 1s. You can use any two things (bi- means two) to create a binary code. Use a line to connect two things that would make sense to put together in a code! (Inspired by a Science Friday activity.)



Bonus: What other ways can you represent a binary code? You will need two symbols that can exist in the same sphere. Write down some ideas here: