Katherine Johnson

1918-2020

Career: Computing

Accomplishments:

- 35-years at NASA
- Mastered manual calculations + pioneered the use of computers in the process of these calculations
- Her calculations enabled the success of missions including Project Mercury, The Apollo Lunar and Command Modules, The Space Shuttle Program, and a mission to Mars

Awards:

- Awarded the Congressional Gold Medal
- The Presidential Medal of Freedom.

Evelyn Boyd Granville

1924-present

Career: Mathematics

Accomplishments:

- The second African-American woman to receive a Ph.D. in Mathematics from an American University
- Graduated from Yale in 1949
- Her work including pioneering advances in computing
- Her tenure at IBM led to contributions to the Apollo Program.

Awards:

- Awarded an honorary Doctorate degree from Smith College

Annie Easley

1933–2011

Career:

Computer Science/Mathematics/ Rocket Science

Accomplishments:

- Worked for NASA at the Lewis Research Center, developing software for the Centaur rocket, also used in the Cassini probe
- One of the first African Americans to work as a computer scientist at NASA.

Awards:

- Special Achievement Award

Mary Jackson

1921-2005

Career:

Mathematics + Aerospace Engineering

Accomplishments:

- Mathematician & aerospace engineer with NASA
- NASA's first Black female engineer in 1958
- Manager of the Federal Women's Program & Affirmative Action Program
- NASA Washington DC Headquarters was renamed in her honor

Awards:

- The Congressional Gold Medal.

Binary Letters

Uppercase	Lowercase
A : 01000001	a : 01100001
B : 01000010	b : 01100010
C : 01000011	c : 01100011
D : 01000100	d : 01100100
E : 01000101	e : 01100101
F : 01000110	f : 01100110
G : 01000111	g : 01100111
H : 01001000	h : 01101000
I : 01001001	i : 01101001
J : 01001010	j : 01101010
K : 01001011	k : 01101011
L : 01001100	l : 01101100
M : 01001101	m : 01101101
N : 01001110	n : 01101110
O : 01001111	o : 01101111
P : 01010000	p : 01110000
Q : 01010001	q : 01110001
R : 01010010	r : 01110010
S : 01010010	s : 01110011
T : 01010010	t : 01110100
U : 01010101	u : 01110101
V : 01010110	v : 01110110
W : 01010111	w : 01110111
X : 01011000	x : 01111000
Y : 01011001	y : 01111001
Z : 01011010	z : 01111010

Write your name in Binary Code:

- Be aware of the upper and lowercase letters
- have fun with this
- write out a friend's or family members name as well

Once you've mastered this...check out the decoding messages.

Decode the message

Message 1:

"01011001*01101111*01110101_
01100011*01100001*01101110
_01100100*01101111_
01110100*01101000*01101001
*01110011"

Message 2:

"01010010*01110010*01111001
_01111001*01101111*01110101*
01110010_
01100010*01100101*01110011
*01110100!"