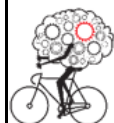


NAME: _____



LAST LESSON YOU WERE INTRODUCED
TO BINARY.

CAN YOU **EXPLAIN** WHAT BINARY IS?

CHALLENGE:

ANYTHING THAT IS 'DIGITAL' USES BINARY. CAN YOU THINK
OF OTHER DEVICES, OTHER THAN A COMPUTER THAT IS
DIGITAL AND USES BINARY?

HOW MANY CAN YOU THINK OF?

HALF-TERM I**R**EACT FOCUS: **EXPLAIN**

I**R**EACT

NAME: _____

BINARY ADDITION

1. SIMPLE

$$\begin{array}{r} 1) \\ 1\ 0\ 1\ 0 \\ 0\ 0\ 0\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 2) \\ 0\ 1\ 0\ 0 \\ 1\ 0\ 0\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 3) \\ 1\ 0\ 1\ 0 \\ 0\ 1\ 0\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 4) \\ 0\ 1\ 0\ 1 \\ 1\ 0\ 0\ 0 \\ \hline \end{array} +$$

2. TRICKY

$$\begin{array}{r} 5) \\ 1\ 0\ 1\ 1 \\ 0\ 0\ 1\ 0 \\ \hline \end{array} +$$

$$\begin{array}{r} 6) \\ 1\ 0\ 0\ 1 \\ 0\ 1\ 0\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 7) \\ 0\ 0\ 1\ 0 \\ 1\ 0\ 1\ 0 \\ \hline \end{array} +$$

$$\begin{array}{r} 8) \\ 1\ 0\ 1\ 0 \\ 0\ 0\ 1\ 1 \\ \hline \end{array} +$$

3. COMPLEX

$$\begin{array}{r} 9) \\ 1\ 1\ 1\ 0 \\ 0\ 0\ 1\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 10) \\ 0\ 0\ 1\ 1 \\ 0\ 1\ 1\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 11) \\ 0\ 0\ 1\ 0 \\ 0\ 1\ 1\ 1 \\ \hline \end{array} +$$

$$\begin{array}{r} 12) \\ 1\ 1\ 1\ 0 \\ 0\ 1\ 1\ 1 \\ \hline \end{array} +$$

CHALLENGE: Try these.

$01101101 + 01000110$

$00111111 + 10000001$

$01010010 + 00011001$

$11001000 + 00110010$

$01001010 + 10001011$

$01000111 + 10011111$

$10110110 + 00110101$

$01100001 + 10001100$

$11110011 + 01100010$

NAME: _____

HOW TEXT IS STORED ON A COMPUTER

ASCII CODES:

A	01000001	N	01001110	a	01100001	n	01101110
B	01000010	O	01001111	b	01100010	o	01101111
C	01000011	P	01010000	c	01100011	p	01110000
D	01000100	Q	01010001	d	01100100	q	01110001
E	01000101	R	01010010	e	01100101	r	01110010
F	01000110	S	01010011	f	01100110	s	01110011
G	01000111	T	01010100	g	01100111	t	01110100
H	01001000	U	01010101	h	01101000	u	01110101
I	01001001	V	01010110	i	01101001	v	01110110
J	01001010	W	01010111	j	01101010	w	01110111
K	01001011	X	01011000	k	01101011	x	01111000
L	01001100	Y	01011001	l	01101100	y	01111001
M	01001101	Z	01011010	m	01101101	z	01111010
.	00101110	,	00100111	!	00100001	SPC	00100000

TASK 1:

Write your name in ASCII code. Make sure you use capital letters at the start of each name.

FIRST NAME LETTERS	BINARY	LAST NAME LETTERS	BINARY

TASK 2:

Write three short words for your friend to decrypt.

CODE						
LETTER						

CODE						
LETTER						

CODE						
LETTER						