

Ms. Grayson's 7th Grade Cyber Security Workshop Lesson Plan

Today you will use ASCII code to convert letters into their binary equivalent and vice versa. You will use the information to guess a phrase. You will use today's information tomorrow in a near pod activity where you will decipher ASCII codes independently.

Learning Objective: Student will be able to decode (decipher) messages using ASCII code.

Duration: Two Days – Day 1 introduction notes and discussion

Day 2 Near Pod activity (Binary code and ASCII messages)

Vocabulary: **Decipher** – to make out, or discover the meaning of something,

- to interpret by the use of a key, as something written in cipher.

To decipher a secret message.

ASCII – American Standard Code for Information Interchange

Binary Number – a number expressed in the base -2 numeral system which uses only two symbols: typically "0" ([zero](#)) and "1" ([one](#)).

Warm up: Introduction to ASCII via lesson notes, activity and discussion.

Materials Used: ASCII Table, Pen, Pencil, Paper, Notebook, Computer, NearPod,

Char.	ASCII	Char.	ASCII	Char.	ASCII
@	64	U	85	j	106
A	65	V	86	k	107
B	66	W	87	l	108
C	67	X	88	m	109
D	68	Y	89	n	110
E	69	Z	90	o	111
F	70	[91	p	112
G	71	\	92	q	113
H	72]	93	r	114
I	73	^	94	s	115
J	74	_	95	t	116
K	75	`	96	u	117
L	76	a	97	v	118
M	77	b	98	w	119
N	78	c	99	x	120
O	79	d	100	y	121
P	80	e	101	z	122
Q	81	f	102	{	123
R	82	g	103		124
S	83	h	104	}	125
T	84	i	105	~	126

Letter	Decimal Value	Binary Code							
		64	32	16	8	4	2	1	
B									
l									
u									
e									
M									
o									
o									
n									
			1	0	0	0	1	0	0
			1	1	0	0	0	0	1
			1	1	0	1	1	1	0
			1	1	0	0	0	1	1
			1	1	0	0	1	0	1

Can You Guess The Phrase

Before And After :

Closure: Ask class 1: What is ASCII

2: Why do we hide messages in text

3: What is the letter C in ASCII

4: What is a binary number