ASCII Reference Sheet

What is ASCII?

ASCII (American Standard Code for Information Interchange) is a widely used system for character encoding. It was originally developed in 1963 as a 7-bit system allowing for 128 characters. Symbols 0-31 and 127 were reserved for control characters (e.g. "Backspace" or "Delete") with the numbers 32-126 being used for printable characters. As the 8-bit "byte" became standardized, ASCII was extended to the 8-bit format you see below.

Num.	Bits	Char.	Num.	Bits	Char.	Num.	Bits	Char.
32	00100000	Space	64	01000000	@	96	01100000	`
33	00100001	!	65	01000001	A	97	01100001	a
34	00100010	"	66	01000010	B	98	01100010	b
35	00100011	#	67	01000011	C	99	01100011	c
36	00100100	$	68	01000100	D	100	01100100	d
37	00100101	%	69	01000101	E	101	01100101	e
38	00100110	&	70	01000110	F	102	01100110	f
39	00100111	'	71	01000111	G	103	01100111	g
40	00101000	(	72	01001000	H	104	01101000	h
41	00101001	)	73	01001001	I	105	01101001	i
42	00101010	*	74	01001010	J	106	01101010	j
43	00101011	+	75	01001011	K	107	01101011	k
44	00101100	,	76	01001100	L	108	01101100	l
45	00101101	-	77	01001101	M	109	01101101	m
46	00101110	.	78	01001110	N	110	01101110	n
47	00101111	/	79	01001111	O	111	01101111	o
48	00110000	0	80	01010000	P	112	01110000	p
49	00110001	1	81	01010001	Q	113	01110001	q
50	00110010	2	82	01010010	R	114	01110010	r
51	00110011	3	83	01010011	S	115	01110011	s
52	00110100	4	84	01010100	T	116	01110100	t
53	00110101	5	85	01010101	U	117	01110101	u
54	00110110	6	86	01010110	V	118	01110110	v
55	00110111	7	87	01010111	W	119	01110111	w
56	00111000	8	88	01011000	X	120	01111000	x
57	00111001	9	89	01011001	Y	121	01111001	y
58	00111010	:	90	01011010	Z	122	01111010	z
59	00111011	;	91	01011011	[	123	01111011	{
60	00111100	<	92	01011100	\	124	01111100		
61	00111101	=	93	01011101	]	125	01111101	}
62	00111110	>	94	01011110	^	126	01111110	~
63	00111111	?	95	01011111	_			