TEJ 3M & TEJ4M

ASCII Worksheet

4. **Decode the following table:**

Letter	ASCII code	Binary value
N	78	1001110
O	79	01001111
space	32	100000
F	70	01000110
I	73	01001001
S	83	1010011
H	72	01001000
space	32	100000
P	80	01010000
L	76	01001100
E	69	01000101
A	65	1000001
S	83	01010011
E	69	1000101

5. **Write a secret message:**

- Using the ASCII chart, lookup the decimal values for each letter and write it down in a series
- Don't forget the spaces between your letters
- Convert the decimal values to binary using the process we've already practiced
- Record your encoded message in 8-bit groups (bytes) on a separate piece of paper, one byte per line
- Give your encoded message to a friend and have them decode the message into text

TEJ 3M & TEJ4M

ASCII Worksheet

1. Use an ASCII Table to decode the following message:

   83, 116, 101, 119, 97, 114, 116, 32, 105, 115, 32, 116, 104, 101, 32, 99, 111, 111, 108, 101, 115, 116, 33

   Stewart is the coolest!

2. Encode your first and last name in ASCII

   71 117 114 112 114 101 101 116 32 83 105 110 103 104

3. Convert the following numbers to decimal, then use the ASCII table to determine the letters they represent:

   01010011

   83_{10}

   S

   01101000

   104_{10}

   h

   01101001

   105_{10}

   i

   01110000

   112_{10}

   p

4) • 78

D	R
39	0
19	1
9	1
4	1
2	0
1	0
0	1

1 + 2 + 4 + 8 + 64

79_{10}

• 32

D	R
16	0
8	0
4	0
2	0
1	0
0	1

• 01000110

64 + 4 + 2

70_{10}

01001001

64 + 8 + 1

73_{10}

83

D	R
41	1
20	1
10	0
5	0
2	1
1	0
0	1

• 01001000

64 + 8

72

• 01010000

64 + 16

80

• 01001100

64 + 8 + 4

76

• 01000101

64 + 4 + 1

69

• 65

D	R
32	1
16	0
8	0
4	0
2	0
1	0
0	1

• 01010011

64 + 16 + 2 + 1

83

Hilroy

D	R
34	1
17	0
8	1
4	0
2	0
1	0
0	1