Storing Text Worksheet

1) How does a computer store text?

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| By storing them as binary numbers |

2) What is a character set?

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| The name given to the the complete set of characters that the computer can represent |

3) What does ASCII stand for?

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| American Standard code for Information interchange |

4) How many **bytes** does it take to store a single character?

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5) Give an example of a control character, include its ASCII value as well.

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| Return key = 13 = 00001101 |

6) Complete the following Table.

(Note, only the first letter should be a capital)

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| **Character** | **ASCII Value** | **Binary Value** |
| **S** | 083 | **01010011** |
| **t** | **116** | **01110100** |
| **o** | 111 | **01101111** |
| **r** | **114** | **01110010** |
| **e** | 101 | **01100101** |
| **Space** | **32** | **00100000** |
| **t** | **116** | **01110100** |
| **e** | 101 | **01100101** |
| **x** | **120** | **01111000** |
| **t** | **116** | **01110100** |

7) Encode your forename name into ASCII values using Capital letters.

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| Character | ASCII Value |
| **B** | **66** |
| **E** | **69** |
| **N** | **78** |
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8) Decode the following messages which are written in ASCII. There is an ASCII table [here](http://www.asciitable.com/) to help

a) 067 111 109 112 117 116 105 110 103 032 105 115 032 103 114 101 097 116 033

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| Computing is great! |

b) 067 111 109 112 117 116 101 114 115 032 117 115 101 032 065 083 067 073 073 032 116 111 032 115 116 111 114 101 032 116 101 120 116 046

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| Computers use ASCII to store text. |

9) Unicode is another way to represent characters.

a) What are the advantages of Unicode over ASCII?

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| You can store multiple character sets |

b) Are there any disadvantages to using Unicode?

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| **Yes, you can store ½ as many characters** |