Q1. Since computers use only 0 or 1, 2^9=512< 1000 < 2^10==1024, so 10 bits .

Q2.

10(10) = 00001010(2)
120(10)=01111000(2)
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130(10)=10000010(2)

in 2’s complement, 1+1 = 10 , 0+1 = 1, 0+0 = 0, 1+1+1 = 11 and the computer use this to sum numbers.