Solutions Lab-session 3

1)

E	F	G	H	I	J
	Symbol	Number	Name	Atomic Weight	
	Ar	18	Argon	39.948	
	Formula				
	symbol:	C	H	O	
	times:	12	22	11	
	partial mass:	144.132	22.17468	175.9934	
	molecular weight:	342.3			

Molecular weight sugar

G10: =IF(G$8 <> 0, VLOOKUP(G$8,$A$2:$D$110,2,FALSE)*G$9," ")

H10: =IF(H$8 <> 0, VLOOKUP(H$8,$A$2:$D$110,2,FALSE)*H$9," ")

I10: =IF(I$8 <> 0, VLOOKUP(I$8,$A$2:$D$110,2,FALSE)*I$9," ")

G11: =ROUND(SUM(G10:K10),2)

2) a) Function Stir(n)

   Stir = n * Log(n) - n

   End Function

   b) $\ln(100!) = 363.7393756$, Stir(100) = 360.5170186 $\rightarrow$ 99.11%

3) a) Function sinapp(x)

   sinapp = x - x ^3 / 6

   End Function

   b) $\sin(0.1) = 0.099833417$, sinapp(0.1) = 0.099833333 $\rightarrow$ 99.99991655%

4) Function celsius(Fa)

   celsius = (Fa - 32) * 5 / 9

   End Function

   Fa(90)$\rightarrow$32.22

5) Function addst(x As String, y As String, z As String) As String

   addst = x & " " & y & " " & z

   End Function