Chemistry 115 Name

Dr. Cary Willard

Quiz 3a (20 points) September 21, 2010

All work must be shown to receive credit

1. (8 points) A bag of M&M’s says that there are 210 Cal in a 42 gram serving of the dark chocolate variety.
   1. Determine the Cal/g for M&Ms.
   2. If jogging requires 0.173 Cal/kg min, how many grams of M&Ms would need to be ingested in order to provide enough energy for a 160 lb person to jog for three hours?
2. (4 points) Define the terms orbit and orbital and distinguish between them.
3. (2 points) How many electrons will fit into one orbital?
4. (6 points) Write out the complete electron configuration for the following atoms
   1. Carbon
   2. Nickel

Chemistry 115 Name

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Quiz 3b (20 points) September 21, 2010

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1. (8 points) A bag of M&M’s says that there are 210 Cal in a 42 gram serving of the dark chocolate variety.
   1. Determine the Cal/g for M&Ms.
   2. If jogging requires 0.173 Cal/kg min, how many grams of M&Ms would need to be ingested in order to provide enough energy for a 140 lb person to jog for three hours?
2. (4 points) Define the terms orbit and orbital and distinguish between them.
3. (2 points) How many electrons will fit into one orbital?
4. (6 points) Write out the complete electron configuration for the following atoms
   1. nitrogen
   2. Vanadium