Chemistry 115 Name

Dr. Cary Willard

Quiz 3a (20 points) September 23, 2010

All work must be shown to receive credit

1. (8 points) A Milky Way Midnight bar says that there are 220 Cal in a 49.9 gram serving.
	1. Determine the Cal/g for Milky Way.
	2. If bicycling requires 0.127 Cal/kg min, how many grams of Milky Way would need to be consumed in order to provide enough energy for a 130 lb person to bike 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. Oxygen
	2. Technetium (Tc)

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Quiz 3b (20 points) September 23, 2010

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1. (8 points) A Milky Way Midnight bar says that there are 220 Cal in a 49.9 gram serving.
	1. Determine the Cal/g for Milky Way.
	2. If bicycling requires 0.127 Cal/kg min, how many grams of Milky Way would need to be consumed in order to provide enough energy for a 150 lb person to bike for four 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. Fluorine
	2. Zirconium (Zr)