

IB Biology		Per 1(3)		8/19-8/23		
Unit/Theme		Objectives	Activities	Homework	Closure/Review	Assessment
M O N	2.1 Molecules to Metabolism 2.2 Water (2x83min)	<ul style="list-style-type: none"> Molecular biology explains living processes in terms of the chemical substances involved. Carbon atoms can form four covalent bonds allowing a diversity of stable compounds to exist. Life is based on carbon compounds including carbohydrates, lipids, proteins and nucleic acids. Metabolism is the web of all the enzyme-catalysed reactions in a cell or organism. Anabolism is the synthesis of complex molecules from simpler molecules including the formation of macromolecules from monomers by condensation reactions. Catabolism is the breakdown of complex molecules into simpler molecules including the hydrolysis of macromolecules into monomers. 	<ul style="list-style-type: none"> Turn in and Grade MMMR/Graphing HO Turn in and Grade Helium Football Graphs Turn in Safety Contract Notes/Lecture 2.1 Molecules to Metabolism Notes/Lecture 2.2 Water Lab: Properties of Water * Guided 	<ul style="list-style-type: none"> Read 2.2 Print Properties of Water Lab Helium Football Lab *Convert lab to excel *data table *analysis graph *error bars *Email to me at francfm2@nv.ccsd.net 	<ul style="list-style-type: none"> MMMR/Graphing HO 	<ul style="list-style-type: none"> Data Analysis Graphs
	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day
	2.2 Water (83Min)	<ul style="list-style-type: none"> Water molecules are polar and hydrogen bonds form between them. Hydrogen bonding and dipolarity explain the cohesive, adhesive, thermal and solvent properties of water. Substances can be hydrophilic or hydrophobic. Explore Pseudoscience claims Practice Explanation portion of IA format 	<ul style="list-style-type: none"> Lab: Properties of Water * Guided *Practice with Vernier Probes *Develop inquiry lab for specific heat of water using Vernier Probes *Run Inquiry Lab 	<ul style="list-style-type: none"> Helium Football Lab (DUE) *Convert lab to excel *data table *analysis graph *error bars **Email to me at francfm2@nv.ccsd.net 	<ul style="list-style-type: none"> Practicing IA Format 	<ul style="list-style-type: none"> MMMR/Graphing HO
	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day
	2.2 Water (2x83min)	<ul style="list-style-type: none"> Application: Use of water as a coolant in sweat. Students should know at least one example of a benefit to living organisms of each property of water. Skill: Drawing molecular diagrams of glucose, ribose, a saturated fatty acid and a generalized amino acid. Skill: Identification of biochemicals such as sugars, lipids or amino acids from molecular diagrams. 	<ul style="list-style-type: none"> Helium Football was DUE Notes/Lecture:2.2 Water *Acid/Base *Buffers Lab: Properties of Water * Guided (DUE) *Practice with Vernier Probes *Develop inquiry lab for specific heat of water using Vernier Probes *Run Inquiry Lab 	<ul style="list-style-type: none"> Convert Water Inquiry lab into Excel Analysis -Raw Data Table -Analysis Graph 	<ul style="list-style-type: none"> Analysis portion of IA report 	<ul style="list-style-type: none"> Spreadsheet of Data Analysis