IB Biology		Per 1				1/6-1/10
	Unit/Theme	Objectives	Activities	Homework	Closure/Review	Assessment
M O N	3.5 Genetic modification and biotechnology	• Gel electrophoresis is used to separate proteins or fragments of DNA according to size. • PCR can be used to amplify small amounts of DNA. • DNA profiling involves comparison of DNA. • Genetic modification is carried out by gene transfer between species. • Clones are groups of genetically identical organisms, derived from a single original parent cell. • Many plant species and some animal species have natural methods of cloning. • Animals can be cloned at the embryo stage by breaking up the embryo into more than one group of cells. • Methods have been developed for cloning adult animals using differentiated cells.	• Notes/Lecture: 3.5 Genetic Modification and Biotechnology	• Print DNA Fingerprinting lab and Answer Sheet • Print pGlo lab and answer sheet • Analysis of data on risks to monarch butterflies from Bt crops (see powerpoint)	• Analysis of Monarch Butterfly Data • Specimens for cloning	• Analysis of Bt corn on Monarch Butterflies
T U E S	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day
W E D	3.5 Genetic modification and biotechnology	• Gel electrophoresis is used to separate proteins or fragments of DNA according to size. • PCR can be used to amplify small amounts of DNA. • DNA profiling involves comparison of DNA. • Genetic modification is carried out by gene transfer between species. • Clones are groups of genetically identical organisms, derived from a single original parent cell. • Many plant species and some animal species have natural methods of cloning. • Animals can be cloned at the embryo stage by breaking up the embryo into more than one group of cells. • Methods have been developed for cloning adult animals using differentiated cells.	• Turn in Monarch Butterfly and Bt corn analysis • Lab: DNA Fingerprinting *Digest DNA *Pour Gels *Practice Loading Gels	• Print pGlo lab and answer sheet	• Analysis of Monarch Butterfly Data • Specimens for cloning	• Analysis of Bt corn on Monarch Butterflies
T H U R S	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day	Same as A Day
F R I	3.5 Genetic modification and biotechnology	• Gel electrophoresis is used to separate proteins or fragments of DNA according to size. • PCR can be used to amplify small amounts of DNA. • DNA profiling involves comparison of DNA. • Genetic modification is carried out by gene transfer between species. • Clones are groups of genetically identical organisms, derived from a single original parent cell. • Many plant species and some animal species have natural methods of cloning. • Animals can be cloned at the embryo stage by breaking up the embryo into more than one group of cells. • Methods have been developed for cloning adult animals using differentiated cells.	• Lab: DNA Fingerprinting *Dye DNA *Pour Gels *Load Gel *Run Electrophoresis of DNA *Stain Gels	• Print pGlo lab and answer sheet	• Plotting DNA results on Semi log paper	• DNA Gel electrophoresis Lab • Transformation Lab • Plant Cloning Lab