

IB Biology		Per 1		1/27-1/31		
Unit/Theme		Objectives	Activities	Homework	Closure/Review	Assessment
M O N	3.5 Genetic modification and biotechnology	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Lab: DNA Fingerprinting <ul style="list-style-type: none"> *Destain Gels *Analyze Gels *Plot marker on regular graph paper and semi-log paper Lab: Transformation <ul style="list-style-type: none"> *Transform E. coli 	<ul style="list-style-type: none"> Work on DNA Fingerprinting Lab Work on Transformation Lab Read 3.5 Prepare IA 	<ul style="list-style-type: none"> Test material 	<ul style="list-style-type: none"> DNA Fingerprinting Lab Transformation Lab
	T U E S	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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Lab: DNA Fingerprinting <ul style="list-style-type: none"> *Destain Gels *Analyze Gels *Plot marker on regular graph paper and semi-log paper Lab: Transformation <ul style="list-style-type: none"> *Transform E. coli 	<ul style="list-style-type: none"> Finish DNA Fingerprinting Lab Read 3.5 Finish Transformation Lab Study for Test Prepare IA 	<ul style="list-style-type: none"> Test material 	<ul style="list-style-type: none"> DNA Fingerprinting Lab Transformation Lab
	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
F R I	Internal Assessment	<ul style="list-style-type: none"> Practice research skills Utilize communication skills Demonstrate thinking skills Practice social skills Utilize self-management skills 	<ul style="list-style-type: none"> Test: Biotechnology and Genetic Modification Begin Internal Assessment <ul style="list-style-type: none"> *Create safety protocols *Keep track of all data *Revise Lab (as needed) *Test run protocol 	<ul style="list-style-type: none"> Work on IA Write-up Refer to Criteria and checklist often 	<ul style="list-style-type: none"> IA Criteria 	<ul style="list-style-type: none"> Internal Assesment