

MYP Subject Area: Sciences

Unit Title	Key Concept	Related Concepts	Global Context	Statement of Inquiry	Subject Objectives & Strands	Overview of Summative Assessment Task	Approaches to Learning Skill Clusters	Content
A: Studying People Scientifically (Sept/Oct_ 6wks)	Process	Evidence, Design, Methods	Scientific and Technological Innovation	Carefully analyzing the elements of an experimental design allows an individual to evaluate the effectiveness of clinical trials.	C. Processing and Evaluating (ii, iv, v) Activity 8 Data Toss B. Inquiring and Designing (i-iv)	Activity 10 AQs 3/4 Which clinical trial should be funded and why? Rewrite one of the weaker trials including how it could be improved.	III. Organization (In writing and Science Journals)	Experimental Design, Evidence, Control and Treatment Group, Placebo
B: Body Systems (Activities 11-17) & Bioengineering (Activities 102, 103, 105, 107, 108) (7 wks) (Oct/Nov)	Systems	Consequences, Interactions, Functions	Identities and Relationships	Understanding the functions of the body's organ systems helps humans to make day to day decisions to stay as healthy as possible.	A. Knowing and Understanding (i, ii, iii)	Activity 12 Post-Test Reflection-Students redraw the body and included corrections from where they were incorrect on the pre-test.	V. Reflection Skills	Respiratory, Cardio, Digestive Systems
E: Ecology (9 wks) (Dec/Jan)	Systems	Interaction, Environment, Energy	Globalization & Sustainability	Human actions may alter the way in which organisms interact with the natural environment and transfer matter & energy.	D: Reflecting on the Impacts of Science (i, ii)	Act. 87 AQ 1 (ET)What, if anything should be done about the growing population of zebra mussels?	VI. Information Literacy (Invasive Species Research Project)	Population, Abiotic/Biotic Factors, Competition, Carrying Capacity, Invasive Species, Habitat
F: Evolution (6wks) (Feb/March)	Change	Consequences, Evidence, Balance	Orientation in Time and Space	Population change is a consequence of the unbalanced opportunities provided by natural selection.	A, Knowing and Understanding (i, ii, iii)	Act. 101 AQ 4 RAFT Dodo Bird extinction take a perspective and explain why the dodo bird went extinct.	VIII. Critical Thinking (Analyzing and evaluating issues and ideas)	Fossils, Geological Eras, Natural Selection, Adaptations, Extinction, Darwin, Lamarck, Mutations
C: Cell Biology & Disease (7 wks) (April May)	Relationships	Models, Consequences, Interaction	Scientific Technology & Innovation	There are numerous trade-offs one must weigh when deciding to take an antibiotic or get a vaccination.	C. Processing and Evaluating (i, ii)	Activity 51 AQ 1/2 Students interpret and analyze their graph of bacteria strains after taking an antibiotic. They argue whether the antibiotic cured the disease or not.	VIII. Critical thinking (interpret data, draw reasonable conclusions and generalizations)	Infectious Disease, Quarantining, Vector, Carrier, Antibiotic, Vaccine, Antibiotic Resistance, Bacteria, Virus, Cell, Cell parts/functions
D: Genetics (Activities 54-65-67) (5 wks) (May/June)	Relationships	Models, Structures, Patterns	Identities & Relationships	The ability to comprehend the models and structures of our own DNA can be utilized to make future health decisions.	D: Reflecting on the Impacts of Science (i, ii, iii, iv)	Activity 67 AQ 3 Pretend you are Joe's friend. Write a letter to Joe telling him whether you think he should be genetically tested for Marfan Syndrome using his parents genetic info and his family pedigree.	I. Communication Skills (through language, negotiate ideas and knowledge with peers and teachers)	Inheritance, Heredity, Trait, Characteristic, Pedigree, Generation, Asexual Reproduction, Sexual Reproduction, Heterogeneous, Homogeneous, Dominant, Recessive, Offspring, Probability, Mendel, Punnett Square