HUMAN GENETIC VARIATION			
Hawaii Content and Performance Standards: Biological Science – Grades 9 – 12			
Activity	Benchmark	Descriptor	
3	SC.BS.1.1	Describe how a testable hypothesis may need to be revised to guide a scientific investigation.	
1, 2, 3, 4	SC.BS.1.3	Defend and support conclusions, explanations, and arguments based on logic, scientific knowledge, and evidence from data.	
3	SC.BS.1.4	Determine the connection(s) among hypotheses, scientific evidence, and conclusions.	
2, 3	SC.BS.1.5	Communicate the components of a scientific investigation, using appropriate techniques.	
3	SC.BS.1.7	Revise, as needed, conclusions and explanations based on new evidence.	
2, 3, 4	SC.BS.2.1	Explain how scientific advancements and emerging technology have influenced society.	
3	SC.BS.2.2	Compare the risks and benefits of potential solutions to technological issues.	
2	SC.BS.5.3	Explain the structural properties of DNA and the role of DNA in heredity and protein synthesis.	
2, 3, 4	SC.BS.5.5	Explain chromosomal mutations, their possible causes, and their effects on genetic variation.	
Hawaii Content and Performance Standards: Mathematics – Pre-Algebra and Algebra			
Activity	Benchmark	Descriptor	
2	MA.PA.1.3	Use ratios and proportions to represent the relationship between two quantities.	
2	MA.PA.4.3	Use ratios and proportions to solve measurement problems.	
3	MA.PA.11.2	Judge the validity of data based on the data collection method.	
3	MA.PA.14.1	Judge the validity of conjectures that are based on experiments or simulations.	
Hawaii Content and Performance Standards: Language Arts – Grades 9 & 10			
Activity	Benchmark	Descriptor	
All activities	LA.9.1.1 LA.10.1.1	Use new grade-appropriate vocabulary, including content area vocabulary, learned through reading and word study.	
2, 3, 5	LA.10.1.2	Independently use a variety of strategies to gain information from print and online resources, both primary and secondary, as part of a research plan to support a thesis.	
All activities	LA.9.2.2	Analyze questions not answered by a selected text.	
All activities	LA.9.4.1 LA.10.4.1	Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as: • narratives or scripts with a theme and details that contribute to a mood or tone	

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		• literary, persuasive, and personal essays		
		research papers that state and support a thesis		
		functional writing including forms, applications, and questionnaires		
		pieces to reflect on learning and to solve problems		
All activities	LA.10.4.2	Use knowledge of sentence structure, grammar, punctuation, capitalization, and spelling to produce grade-appropriate writing in standard English.		
All activities	LA.9.4.4	Use a variety of strategies and resources to spell grade-appropriate words.		
All activities	LA.9.5.1	Use accurate and useful research information in writing.		
All activities	LA.9.5.3 LA.10.5.3	Use a variety of sentence structures (e.g., parallel phrasing, subordination) and grade-appropriate vocabulary to achieve efficiency, indicate emphasis, and clarify meaning.		
All activities	LA.9.5.4	Use a voice and tone appropriate for the topic, purpose, and audience.		
All activities	LA.9.6.1 LA.10.6.1	Organize and participate in a small group to accomplish a task or explore a topic. (9) Participate in a small group (e.g., plan sessions, decide on procedures, plan sessions, assign responsibilities, evaluate results). (10)		
All activities	LA.9.6.5 LA.10.6.7	Adjust dialect (e.g., standard English, Hawaiian Creole, colloquialisms) to grade-appropriate audience, purpose, and situation.		
1, 2, 3, 5	LA.10.7.1	Incorporate information from a range of print and online sources.		
Hawaii Content and Performance Standards: Health – Grades 9 – 12				
Activity	Benchmark	Descriptor		
3, 4, 5	HE.9-12.1.3	Identify personal health behaviors and other factors that impact body system functions.		
5	HE.9-12.1.4	Explain the purpose of public health policies and government regulations in health.		
3, 4, 5	HE.9-12.2.1	Compare health information provided from home, school, and community resources.		
4	HE.9-12.3.3	Evaluate personal behaviors within the risk areas (e.g., tobacco use, alcohol and drug use, nutrition, fitness, personal safety, sexual activity).		
2, 3, 4, 5	HE.9-12.4.1	Evaluate the interrelationship of internal and external factors that influence health behaviors.		
4, 5	HE.9-12.6.1	Explain decision-making strategies used to make health-related decisions.		
4, 5	HE.9-12.6.2	Evaluate health decisions that have immediate and long-term consequences on the individual, family, and community.		
2, 5	HE.9-12.7.3	Evaluate the effectiveness of strategies in communicating health information.		
2, 5	HE.9-12.7.4	Explain how health messages can be translated to particular audiences.		