

		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
Year 1	Unit Title	Chemistry	Science Rocks My World	Boomtown and Disasters	It's a small world after all	Who I am		
	Topics	<ul style="list-style-type: none"> Temperature and particle movement Evidence of physical and chemical change Thermal energy 	<ul style="list-style-type: none"> Earth's flow of materials and Plate Motion 	<ul style="list-style-type: none"> Distribution of natural resources Shaping of the Earth's crust and living with natural hazard 	<ul style="list-style-type: none"> Cell Theory 	<ul style="list-style-type: none"> Body systems Heredity <p>** This unit is new to the curriculum and not yet developed. The Y1 science team will provide updated info, as available, at site visit**</p>		
	Key & Related Concepts	Key: Change Related: Energy	Key: Systems Related: Models, energy	Key: Relationships Related: Environment, consequences	Key: Relationships Related: Interactions, Form, Consequences			
	Global Context & Exploration	Scientific and technical innovation <i>- products, processes, and solutions</i>	Orientation in time and space <i>- scale, duration, frequency and variability</i>	Globalization and sustainability <i>- human impact on the environment</i>	Scientific and technical innovation <i>- opportunity, risk, consequences and responsibility</i>			
	Statement of Inquiry	Energy can lead to changes in products.	Models of a system may be used to analyze patterns.	The relationship between humans and the environment is full of consequences.	The interactions within a system result in consequences and potential risks.			
	Inquiry Questions	<p>F: What do things around us really look like?</p> <p>C: How does energy affect the things around us?</p> <p>D: Under what conditions, should sixth graders be allowed to blow things up?</p>	<p>F: What patterns are present in the system?</p> <p>C: How can models be used to represent a system?</p> <p>D: Should patterns of past "big histories" be used to develop models for the future?</p>	<p>F: How do nonrenewable and renewable resources form?</p> <p>C: How do humans impact Earth?</p> <p>D: Is fracking a good practice?</p>	<p>F: What are the cell parts?</p> <p>C: What happens when cell parts stop performing their jobs?</p> <p>D: Are all systems equally at risk for various consequences? Why does a disease like cancer not always kill a living thing?</p>			
	Approaches to Learning	<p>Information Literacy Skills: collect, record and verify data</p> <p>Critical Thinking Skills: practice observing carefully in order to recognize problems, gather and organize relevant information to formulate an argument, interpret data</p>	<p>Communication Skills: make inferences and draw conclusions</p> <p>Critical Thinking Skills: gather and organize relevant info to formulate an argument</p>	<p>Critical Thinking Skills: identify trends and forecast possibilities</p> <p>Collaboration Skills: build consensus</p>	<p>Critical Thinking Skills: evaluate and manage risk</p> <p>Communication Skills: use a variety of organizers for academic writing tasks</p>			

	Culminating Task	Egg incubator—heat pack usage in egg incubator	Pet Rock	Boomtown—To Frack or Not	Meat or Maggots			
	MYP Criteria	B, C	A, C	A, D	B, C, D			
Year 2		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
	Unit Title	What's Your Potential?	Forces & Interactions	Solar Systems	Digging into Geologic Time	Genetics	Energy in Living Things	Ecosystems
	Topics	Energy	Forces and Interactions	Movement in the solar system Classifying objects in the solar system	Extinction and geological time	Genetics and natural selection	Energy in Living Systems	Ecosystems Human impact on biodiversity
	Key & Related Concepts	Key: Change Related: Evidence, Models	Key: Systems Related: Interaction, Movement	Key: System Related: Form, Movement	Key: Change Related: Environment, Forms, Consequences	Key: Change Related: Environment, Transformation	Key: Systems Related: Form, Function	Key: Systems Related: Balance, Interaction
	Global Context & Exploration	Scientific and Technical Innovation - <i>systems, models, methods</i>	Scientific and Technical Innovation - <i>systems, models, methods</i>	Orientation in Time and Space - <i>scale, duration, frequency and variability</i>	Orientation in Time and Space - <i>epochs, eras, turning points and "big histories"</i>	Scientific and Technical Innovation - <i>adaptation, ingenuity and progress</i>	Globalization and Sustainability - <i>consumption, conservation, natural resources and public goods</i>	Globalization and Sustainability - <i>human impact on the environment</i>
	Statement of Inquiry	Evidence of change can be shown through models.	Models are developed based on the interactions and movements of parts within a system.	No matter the scale of the system, movements and interactions remain the same.	Historical changes between formation of strata and environments can be used to support argument on Earth's history.	Changes in environment drive the need for transformation and adaptation.	Energy moves through the interaction of different systems.	How environmental systems interact and balance out one another can be impacted by humans.
	Inquiry Questions	F: What evidence can be used to show change? C: How can models be used to show evidence of change? D: Does evidence lead to one "best" innovative design? Explain.	F: What interactions can be seen within a system? C: How can models demonstrate different interactions within a system? D: Are interactions always positive? Explain.	F: What are the components of our system? C: How does changing the position allow for observable scale? D: Does the scale effect how well we can understand a model?	F: What is the relationship between form and environment? C: How can arguments be supported by analyzing historical relationships? D: Are we at the turning point on Earth's history? Explain.	F: What changes are present in the environment? What changes can be driven by the environment? C: How does change drive evolution? D: Are all changes positive?	F: What interactions can be seen every day? C: How does conservation help form the natural world? D: Will energy always available? Explain.	F: What are the possible interactions within an ecosystem? C: How do systems interact to balance themselves out? D: Are humans more or less impactful on systems unfamiliar to them?
	Approaches to Learning	Communication Skills: Make inferences and draw conclusions Critical Thinking Skills: Revise understanding based	Information Literacy Skills: Process data and report results Critical Thinking Skills: Interpret data	Communication Skills: Use and interpret a range of discipline-specific terms and symbols Critical Thinking Skills: Interpret data	Communication Skills: Make inferences and draw conclusions. Information Literacy Skills: Make connections between various sources of information.	Critical Thinking Skills: Practice observing carefully in order to recognize problems Creative Thinking Skills: Use brainstorming and visual diagrams to	Information Literacy Skills: access information to be informed and inform others, Make connections between various sources of information.	Communication Skills: Use appropriate forms of writing for different purposes and audiences Critical Thinking Skills: Use models and simulations to explore

		on new information and evidence				generate new ideas and inquiries		complex systems and issues
	Culminating Task	Thermal energy Assessment	Evaluating forces between objects - lab	Solar System – Trip to Pluto	Geologic Column Expert	Pollinator Assessment DMD Assessment Environmental vs Genetic Factors Assessment	Investigating Plants Ecosystem Assessment	2020 Yellowstone Wolf Proposal
	MYP Criteria	B, C	C	D	A	B, C	A	D
		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
Year 3	Unit Title	Thermal Energy	Human Population and Its Impact on the Environment	Weather and Climate Systems	Energy in Waves	Forces, Motion, and Energy	Unity of Life	Diversity of Life
	Topics	Thermal energy	Human population and its impact on the environment	Weather and climate systems	Energy in wave	Forces, motion and energy	Unity of life	Diversity of life
	Key & Related Concepts	Key: Change Related: Energy, Interaction	Key: Relationships Related: Environment, Consequences	Key: Systems Related: Models, Patterns	Key: Relationships Related: Energy, Models	Key: Systems Related: Interaction, Movement	Key: Systems Related: Interactions, Patterns	Key: Change Related: Function, Consequences
	Global Context & Exploration	Scientific and technical innovation - <i>systems, models, methods</i>	Globalization and sustainability - <i>human impact on the environment</i>	Scientific and technical innovation - <i>opportunity, risk, consequences and responsibility</i>	Scientific and technical innovation - <i>mathematical puzzles, principles and discoveries</i>	Scientific and technical innovation - <i>modernization, industrialization and engineering</i>	Orientation in Time and Space - <i>evolution, constraints and adaptations</i>	Scientific and technical innovation - <i>biological revolution</i>
	Statement of Inquiry	Use of different methods helps us understand how energy changes with different materials' interactions.	The consequences of the human impact on the environment can affect the relationship among all living things on Earth.	Models can help us understand consequences of patterns within a system.	Models help us understand principles and relationships of energy.	Interaction and movement between systems can be demonstrated through engineering.	Components within a system interact in patterns that can be used to explain evolution.	Biological revolution can be explained by change in structural functions and the observation of its consequences in nature.
	Inquiry Questions	F: What is energy? C: How do objects interact? D: Are we running out of energy? Explain.	F: What are ways humans impact the environment? C: How can we minimize our impact on the environment? D: Can negative consequences be avoided? Explain.	F: What is a system? C: How can models help us predict patterns? D: Are weather patterns changing? Explain.	F: What is energy? C: How does energy affect us? D: Should we harness natural energy? Explain.	F: What are the possible interactions among objects in a system? What causes movement of an object? C: How do objects interact? D: Can interactions between objects negatively and positively affect systems? Explain.	F: What has changed over time? C: How do patterns help us make predictions about the past and the future? D: Does evolution exist? Explain. Can we always use patterns from the past to predict the future?	F: What are consequences of change? C: How can functions of structure differ? D: Is biological change good? Explain.
	Approaches to Learning	Information Literacy Skills: Collect and analyse data to identify solutions and make informed decisions, Process	Information Literacy Skills: collect and analyze data to identify solutions and make informed decisions, create	Communication Skills: Make inferences and draw conclusions Critical Thinking Skills: Formulate factual,	Critical Thinking Skills: Practice observing carefully in order to recognize problems, Gather and organize relevant information	Communication Skills: Make inferences and draw conclusions Reflection Skills: Consider content – What did I learn about	Communication Skills: Use a variety of organizers for academic writing tasks Critical Thinking Skills: Interpret data	Information literacy Skills: Collect, record and verify data Media literacy skills: Seek a range of perspectives from

		data and report results	references and citations, use footnotes/endnotes and construct a bibliography according to organized conventions Critical Thinking Skills: gather and organize relevant information to formulate an argument	topic, conceptual, and debatable questions.	to formulate an argument.	today? – What don't I yet understand? – What questions do I have now?		multiple and varied sources
	Culminating Task	Thermal energy transfer assessment – food containers	Design a method for monitoring and minimizing personal impact on the environment	Use weather data to predict weather and help community take any safety precautions.	Explain which is better: digital or analog waves. Describe how different amounts of energy are being transferred in a sound wave.	Balloon car design	Students will create an essay which highlights how the form and function of the structures present in embryos might change during development and/or provide evidence for evolution.	Mythical creature cross
	MYP Criteria	B, C	D	A	A, D	B, C	A	C