

IB Vertical Alignment Science Department

Global Context	Identities and Relationships	Identities and Relationships	Identities and Relationships	Scientific and Technical Innovation	Scientific and Technical Innovation	
Name of Unit	Safety	Safety	Safety	Safety	Safety	
Main Content	<p>Main: General safety rules, as well as good teamwork norms in a lab setting</p> <p>Biotech: General safety rules, including safety in specific scenarios such as dissection, bacterial specimen handling, antibiotic specimen handling, testing for toxins and/or pathogens, and HIPAA confidentiality (MP2). Good teamwork norms in a lab setting</p>	<p>Main: General safety rules, good teamwork norms in a lab setting, and organizational skills for time management, task completion, and lab materials.</p> <p>Biotech: General safety rules, respect of lab equipment, good teamwork norms in a lab setting, and organizational skills for time management, task completion, and lab materials.</p>	General safety rules, as well as good teamwork norms in a lab setting	<p>Physics:</p> <p>Chemistry:</p>	<p>Biology: Animal Safety</p> <p>DP Courses:</p>	
Key concept	Relationships	Relationships	Relationships	Change	Change	
Related Concept	Interaction, Consequences	Interaction, Consequences	Interaction, Consequences	Interaction, Consequences	Interaction, Consequences	
ATL's	Collaboration, Critical Thinking	Organization, Critical Thinking	Self Management, Critical Thinking	Critical Thinking	Critical Thinking, Transfer	
Statement of Inquiry	Safe practices enable learners to responsibly interact with materials to plan and collaborate in a laboratory setting avoiding negative consequences.	Safe practices enable learners to responsibly interact with materials to plan and collaborate in a laboratory setting, avoiding negative consequences, and practice organizing resources for appropriate use and conservation.	Safe practices enable learners to manage themselves to responsibly interact with materials to plan and collaborate in a laboratory setting, avoiding negative consequences, and practice organizing resources for appropriate use and conservation.	Recognize and evaluate safe practices that enable learners to responsibly interact with materials and collaborate in a laboratory setting, and organize resources for safe and appropriate use.	Utilize effective safety strategies in unfamiliar situations, in and out of a laboratory setting, and predict possible consequences.	
IB Assessment Criterion	A: Knowing and Understanding	A: Knowing and Understanding D: Reflecting on the impacts of science	A: Knowing and Understanding B: Inquiring and Designing	C: Processing and evaluating	B: Inquiring and Designing D: Reflecting on the impacts of science	
Inquiry Questions	<p>Factual: What are general safety procedures?</p> <p>Conceptual: Why are safety procedures important?</p> <p>Debatable: Who could be affected by use or neglect of safe lab practices?</p>	<p>Factual: What are general safety procedures?</p> <p>Conceptual: What are possible consequences of working in an unsafe lab?</p> <p>Debatable: What are some potential hazards for a given lab situation?</p>	<p>Factual: What are the general safety procedures?</p> <p>Conceptual: What is your role in maintaining safe lab environments?</p> <p>What are the steps that you need to take in order to maintain a safe lab environment?</p>	<p>Factual: What are general safety procedures?</p> <p>Conceptual: What are possible consequences of working in an unsafe lab?</p> <p>Debatable: What is the justification for safety precautions?</p>	<p>Factual: What are general safety procedures?</p> <p>Conceptual: How do safety procedures apply to real world workplaces?</p> <p>What will you do if the unexpected occurs?</p>	

			Debatable: Who is responsible for lab safety, and why?	What are the limits of safe lab practices? How would you evaluate the safety procedures of a given lab?	Debatable: What are the worst possible things that could go wrong, and how will I avoid them?	
Assessment Description	Safety Quiz-Multiple Choice and scenarios Students state safety procedures, Apply safe practices during familiar lab settings and determine if a lab setting is safe.	Safety Quiz-Multiple choice and identity applicable safety procedures in a lab scenario Students can communicate understanding of safety procedures clearly and precisely. Students can outline safety procedures for a specific lab setting. Students can articulate consequences for failing to adhere to safe lab practices (both individual and group).	Safety Quiz-Multiple choice and identity applicable safety procedures in a lab scenario. Students will be able to look at a problem and identify safe and unsafe practices. Students will design proper safety practices when given a laboratory scenario.	Students will be able to outline improvements to a safety practice that would benefit the lab setting. Students will be able to outline the validity of a proposed safety practice	Students will be able to look at a problem and identify safe and unsafe practices. Students will design proper safety practices when given a laboratory scenario. Students can communicate understanding of safety procedures clearly and precisely. Students will apply knowledge of safety procedure when designing an investigation. Students can outline safety procedures for a specific lab setting. Students can articulate consequences for failing to adhere to safe lab practices (both individual and group).	
Grade Level	7th Grade and 7th Grade Biotech	8th Grade and 8th Grade Biotech	9th Grade (Earth Science)	10th Grade (Physics/Chemistry)	11th Grade & 12th Grade (Biology and Beyond)	

IB Vertical Alignment

Global Context					
Unit name					
Main Content					
Key concept					
Related Concept					
ATL's					
Statement of Inquiry					
IB Assessment Criterion					
Inquiry Questions					
Assessment Description					
Months Taught	September, October	November, December	January, February	April	May

1B Year B (Phase 2) Grade 8 (Revised 3/1/2018)					
Global Context	Fairness & Development	Identities & Relationships	Personal & Cultural Expression	Orientation in Time & Space	Globalization & Sustainability
Unit name	Show me what you know	My Activities & Past Times	What's the weather like?	Is it time to eat?	What a Pain!
Main Content	Review: Greetings/Small talk (review verbs), Numbers, Spelling, Where are you from?	Sports/hobbies, Interests, Prepositions of place, directions, Places in town, Question words	Weather/natural disasters, weather verbs, topographical terms, Dates and seasons, celsius vs. fahrenheit	Wellness, Describe food, eating verb, GMO's in Europe, etiquette, restaurant specifics, sustainability, culture of supermarket	Household chores, rooms of a house public recycling rules, environmental laws Clothing
Key concept	Communication	Culture	Creativity	Culture	Connections
Related Concept	Audience, Word Choice	Structure	Function, Meaning	Context, Message	Structure, Conventions
ATL's	Communication, Self-management/Organization	Social/Collaboration Research/ Information	Collaboration Critical Thinking	Information literacy Social Skills	Media Literacy Communication
Statement of Inquiry	Getting to know others helps you determine who you are as an individual.	The leisure activities in a town are influenced by the demographical and geographical make-up.	While ocean currents and jet streams connect continents they also connect people and perspectives	Food culture influenced by government affects the health of a population.	It is the responsibility of global citizens to maintain and protect the health of the environment.
IB Assessment Criterion	B	D & C	B & D	A & C	A
Inquiry Questions	Factual: When do you use formal language vs. informal? Conceptual: How does my word choice reflect who I am as an individual? Debatable: Why is getting to know people from your daily life important?	Factual: What hobbies/interests are integral to the culture? Conceptual: How does the population of a town effect the cultural experiences available? Debatable: Why does the environment impact the culture of the city?	Factual: What is a natural disaster? Conceptual: Why is it important to know the weather conditions of other countries? Debatable: How do climate realities bring us together as a global community?	Factual: What are appropriate table manners? Conceptual:How does the food culture of the US compared to that of the target language country? Debatable: Is where our food comes from and how it's produced important?	Factual: What household chores do you do that have a positive impact on the environment? Conceptual:How does your family assign household responsibilities? Debatable: Is it important to recycle and make a conscious effort to better the environment?

Assessment Description	<ol style="list-style-type: none"> 1. Students will read a dialogue between several people in the target language and answer comprehension questions. 2. Students will read comic strip in the target language and answer comprehension questions. 	<ol style="list-style-type: none"> 1. Students will create an infographic about a target language city/town containing specific information. 2. Conduct a survey asking fellow learners about their free time activities 3. Students will watch a tourism video in the target language and answer comprehension questions. 	<ol style="list-style-type: none"> 1. Students will create a 7 day weather report and present it to the class 2. Students will read an article on a natural disaster and answer comprehension questions 	<ol style="list-style-type: none"> 1. Students will be able to order food in a restaurant setting. 2. Students can read and understand an advertisement in the target language. They will respond to comprehensive questions 	<ol style="list-style-type: none"> 1. Students will design and label their dream house-vision board when given a budget. 2. Students will market and design a fundraiser to raise money for recycling bins for the school. 3. Students will watch a video based on recycling and answer comprehension questions.
Months Taught	September/October	October/November	December/January	February/March	April/May

IB Vertical Alignment Language Acquisition 8 Year 3 (Phase 3) 2A (Revised 3/1/2018)						
Global Context	Orientation in Time & Space	Identities & Relationships	Personal & Cultural Expression	Orientation in Time & Space	Fairness & Development	Globalization and Sustainability
Name of Unit	Mein Alltag	When do you...?	Celebrate good times, come on!	Around time	Upstander/Bystander <i>Might move to L&L Holocaust unit?</i>	Then and now
Main Content	Review concepts of 1A and 1B, comparatives & superlatives, best wishes, daily activities, EU vs. USA	Professions, warden or future tense, time and word order	Review EU traditions of German speaking countries	Places in town, asking and giving directions, commands and prepositions	WWII history, personal narratives, three types of resistance	Past tense-had/was comparing historic present & future plans for EU vs. USA, year in review...
Key concept	Form	Perspective	Culture	Communications	Global interaction	Creativity
Related Concept	Context, empathy	Function, word choice	Point of view, message	Purpose, conventions	Conventions	Structure, meaning
ATL's	Intercultural understanding, Appropriate forms of writing	Access information to be informed Understanding and using technology	Reflective journal, scaffolding academic conversations	Use and interpret symbols	Audience	Reading critically, drawing conclusions
Statement of Inquiry	Empathy is expressed through form and content	Word choice is a result of perspective and function	Point of view and perception are guided by ones culture	Conventions and systems evolve for a particular purpose	Research information and media literacy	Meaning changes with creativity, perspective and support.
IB Assessment Criterion	C (Phase 3)	D (Phase 3)	A (Phase 3)	B &D (Phase 3)	B & C (Phase 3)	A (Phase 3)
Inquiry Questions						
Assessment Description						
Months Taught	September/October	November/December	November/January	January/March	March/April	April/May