

### Examples of Unit Outlines: Questions, Understandings, Task Ideas

TOPIC	UNDERSTANDING: STUDENTS WILL UNDERSTAND <i>THAT</i>	ESSENTIAL QUESTIONS	PERFORMANCE TASKS
Africa	<ul style="list-style-type: none"> <li>• Geography and climate of a region influence the culture, economy, and lifestyles of its inhabitants.</li> <li>• The affect of European Colonization in the 1800's helped determine Africa's third World State today.</li> <li>• Apartheid divided South Africa.</li> </ul>	<ul style="list-style-type: none"> <li>• What is the relationship between geography and climate and the life expectancy of a group of people?</li> <li>• What are reasons for colonization?</li> <li>• If you were a white in South Africa would you want Apartheid abolished?</li> </ul>	<p>You are a white reporter on a liberal South African newspaper. Your goal is to report on the atrocities of Apartheid that the white South African government had imposed on the black majority. Understanding that this information is considered treason you must plan an escape route out of the country. If caught you and your family could be put in jail. Your hope that once this information gets out that the major trading partners will put economic sanctions on South Africa to put pressure on them to abolish Apartheid. Finally come up with a political cartoon that represents your findings of Apartheid.</p>
A Mid-summer Night's Dream	<ul style="list-style-type: none"> <li>• Individual perceptions can cause serious misunderstandings</li> <li>• Great literature paints vivid pictures and is timeless</li> </ul>	<ul style="list-style-type: none"> <li>• How do individual perceptions effect plot twists?</li> <li>• How does Shakespeare develop visuals in his writing?</li> <li>• In what ways do misunderstandings in Mid-summer Night's Dream relate to your life? Other lives?</li> </ul>	<p>Students will write and perform a version of A Midsummer Night's Dream based in a different setting and time</p>
Biomes	<ul style="list-style-type: none"> <li>• The structure of an organism affects its ability to function and survive.</li> </ul>	<ul style="list-style-type: none"> <li>• How would an animal be affected by the loss of a nonessential body part?</li> <li>• Does survival of the fittest mean that the weak can never survive?</li> <li>• What is weak?</li> </ul>	<p>The task is to create a model of an imaginary plant or animal that is capable of surviving in a given environment. Students will need to justify various structures and how they aid in the function and survival of their organism.</p>

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Calculus	<ul style="list-style-type: none"> <li>• Calculus deals with real life problems about change that standard geometry and algebra cannot.</li> </ul>	<ul style="list-style-type: none"> <li>• What do people use area under the curve for?</li> <li>• What ways do we have of finding the area under the curve?</li> </ul>	<p>The Comet is coming</p> <ul style="list-style-type: none"> <li>• Estimate areas and volumes as the sum of areas of tiles and volumes of cubes.</li> <li>• <u>The Comet is coming.</u> NASA has detected a comet that looks like it might come near the earth. They took several measurements of velocity with respect to time. You are the lead mathematician in a think-tank whose task it is to explain the location of the comet in reference to the earth with respect to time and to figure out how close the comet will come to Earth. You are to create a press release that uses the data gathered by NASA that explains your findings to either prepare the audience for a devastating event or to convince them they are safe. The press release will be presented on the front lawn of the White House to an international TV viewing audience. Your press release needs to explain the NASA's data using a graph and the meaning of the area underneath the velocity function. You must also give a definitive answer as to the closest the comet will come to earth.</li> </ul>
Cell Biology	<ul style="list-style-type: none"> <li>• Cells are the building blocks for all living things.</li> <li>• Cells are the basis for an organisms structure and function.</li> <li>• All cells come from other cells.</li> </ul>	<ul style="list-style-type: none"> <li>• Why are cells considered to be the basis for all living things?</li> <li>• What characteristics does an object need to be considered as living? Nonliving?</li> <li>• Why is the structure of a cell significant?</li> <li>• How do cells reproduce?</li> </ul>	<p>Design a travel brochure for a trip to the cell. Indicate what type of cell you are visiting, what organelles you would visit and the function of the cells that you see.</p>

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<p>Cell Structure and Function</p>	<ul style="list-style-type: none"> <li>• Structure and function are interrelated and affect an organisms ability to survive.</li> <li>• There are varying degrees of complexity among organisms.</li> </ul>	<ul style="list-style-type: none"> <li>• How does the interrelationship between structure and function enable an organism to survive?</li> <li>• How would an organisms survival be affected if function and structure were not interrelated?</li> <li>• In regard to structure and function which is more complex – a unicellular organism or a multi-cellular organism?</li> <li>• What does it mean to survive?</li> </ul>	<ul style="list-style-type: none"> <li>• G.R.A.S.P.S.</li> <li>• G - Develop a clear understanding of how all cell parts are related to cell structure and survival and how they are interrelated.</li> <li>• R - You are the owner of a sports team and must make a management plan for your organization.</li> <li>• A – The audience includes all members of your organization who are being briefed on their responsibility to the success of the organization.</li> <li>S – You must relate the jobs entailed in a sports team (from management to players) to the parts of a cell.</li> <li>• P – Understand how cells, whether unicellular or multi-cellular, are like any other team – each part has a specific job function which is related either directly or indirectly to other parts.</li> <li>• S - The finished product will show accuracy, fluency, clarity, evidence of well constructed research.</li> </ul>
<p>Communicating Through Multimedia</p>	<ul style="list-style-type: none"> <li>• Communication is influenced by time, place, and culture.</li> <li>• Available tools, techniques and resources influence the ways in which multimedia can be created.</li> <li>• Clear goals are necessary to create an effective multimedia presentation.</li> </ul>	<ul style="list-style-type: none"> <li>• How do different forms of communication influence people’s perceptions?</li> <li>• What multimedia tools are available today?</li> <li>• What is the process used to plan an effective multimedia presentation?</li> </ul>	<p>You are a newly hired advertising designer for the Center Line Athletic Shoe Company. The company has created a new shoe called the Dragon. Design a national advertising campaign for this new shoe. You will need to present your campaign to the company executives for approval. Only one campaign will be selected from the design team. Make sure your advertising campaign includes an original logo as well as print and electronic media.</p>
<p>Confederation Government</p>	<ul style="list-style-type: none"> <li>• Governments engage in diplomacy with other governments for specific purposes.</li> </ul>	<ul style="list-style-type: none"> <li>• What kinds of governments engage in diplomacy?</li> <li>• For what specific purposes do governments engage in diplomacy?</li> <li>• Can diplomacy be beneficial or harmful?</li> <li>Are there alternatives to diplomacy?</li> </ul>	<p>Your task is to research and document foreign &amp; domestic issues of the confederation period as well as those of the current Bush administration. Your job is to create a visual chart depicting foreign and domestic issues of the confederation period and the Bush administration. The target audience is your classmates. You will need to develop these charts in order to lead your classmates in a discovery discussion. Are the foreign and domestic issues of the Confederation period and the Bush administration similar or dissimilar?</p>
<p>Coping With Catastrophe!</p>	<ul style="list-style-type: none"> <li>• Culture/society shapes individual/institutional response to catastrophe.</li> <li>• Catastrophe/crisis often results in societal changes.</li> <li>• People respond to crisis in similar ways.</li> </ul>	<ul style="list-style-type: none"> <li>• How did individuals/ Institutions respond to the Black Death?</li> <li>• How were these responses shaped by culture /society?</li> <li>• How do people respond to crisis?</li> </ul>	<p>It is the summer of 1348, in Florence, Italy. The plague has taken hold but not yet peaked. Your task is to create a dialogue to escape the plague. What features of your solution would you have been discussing? What alternative courses of action might be open to your family? Given your level of knowledge, what are the pros and cons of various</p>

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			<p>courses of action?</p> <p>Once all families have discussed their options and made their final decisions, they will meet as a group with the mayor and city council. As a group they will present a possible course of action and arguments for their particular course of action to the city council in order to persuade them to a specific course of action to stop the spread of the plague.</p>
Crime	<ul style="list-style-type: none"> <li>• Crime is based on culture’s learned standard of behavior of what is acceptable and unacceptable.</li> <li>• Social, racial and ethnic groups influence crime within a culture.</li> <li>• Freedom and crime impact on one another.</li> </ul>	<ul style="list-style-type: none"> <li>• Why do some parents teach aggressive “chest clubbing”? (And it is not against the law).</li> <li>• Is the underclass in all societies that commit the most crimes?</li> <li>• Why is the crime rate low in Japan?</li> <li>• Why is there less crime in autocratic, cultures?</li> <li>• Why are there more victims than crimes?</li> </ul>	<p>As an FBI criminologist, you have been assigned to investigate a crime comparison between the U.S. and China. You are asked to create a research report with charts and graphs. This report can be presented as a power point presentation. As a contracted criminologist you are not only to research this information, you are to theorize the reasons for similar and contrasting statistics and information.</p>
Customary Measure	<ul style="list-style-type: none"> <li>• The use of customary units of measure is an effective communication tool to accurately describe a student’s physical surroundings.</li> </ul>	<ul style="list-style-type: none"> <li>• Why measure?</li> <li>• Can “techniques” and estimation be used to measure without using measuring tools? In what situations and how so?</li> <li>• Are there instances when units of measure can be interchanged? When and how so?</li> </ul>	<p>The 76’ers have sponsored a contest for all area schools, and your school has won. The winning school will host Matt Geiger for the day. Since you are a homeroom representative, you have been selected to determine if there are any physical obstacles in your building which would limit his ability to participate fully in the school day. Your task is to go about your day with a cardboard likeness of Matt Geiger, assessing mobility. This task will culminate in a Power Point presentation detailing the results of your research.</p>

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<p>Death of a Salesman</p>	<ul style="list-style-type: none"> <li>•A person needs a sense of identity to have a firm grasp on reality.</li> <li>•Modern American values often contradict or prevent the ideas of the founding fathers.</li> <li>•People often create illusions in order to deal with failure.</li> <li>•Moderation is a virtue; excess is destructive.</li> </ul>	<ul style="list-style-type: none"> <li>•What leads people like Willie Loman to exaggerate their successes?</li> <li>•How do “minor” characters like Charlie Berman function to illuminate the shortcomings and failures of the Loman family? How does the love within the Loman family ironically turn out to be destructive?</li> <li>•How does the tension of “city vs. nature” shed light on Willy’s problem?</li> </ul>	<p>Your task is to create a conversation between the characters, Charlie and Bernard, that they might have out the Loman family. You are to assume the point of view of these two secondary characters. Your target audience is your teacher and classmates. The challenge involves dealing with the complex reaction that these two must have to the Lomans. You will create a conversation to show that you understand the difference between the two families and that you have an understanding of the complex, ambivalent relationship with the Lomans.</p>
<p>Delaware Canal</p>	<ul style="list-style-type: none"> <li>• The Delaware Canal had a major impact on the economic and cultural development of the Delaware Valley.</li> <li>•Government, business, and education all play an important role in solving problems in the community.</li> <li>•Education is an empowering factor in resolving problems in the community.</li> </ul>	<ul style="list-style-type: none"> <li>•How did the Delaware Canal have a major impact on the development (economic and cultural) of the Delaware Valley?</li> <li>•How does government, business and education all play an important role in resolving problems in the community?</li> <li>•Why is education an empowering factor in resolving problems in the community?</li> </ul>	<ul style="list-style-type: none"> <li>•Write a newspaper editorial</li> <li>•Create a museum exhibit</li> <li>•Write a journal entry</li> <li>•Reflect on mistakes made in a presentation</li> <li>•Compare two historical periods</li> <li>•Assume the role of a historical character.</li> </ul>
<p>Electric Potential</p>	<ul style="list-style-type: none"> <li>• Some people think of life in terms of how <u>everything works</u>, as opposed to how to <u>work everything</u>.</li> <li>• Capacitors store and release current by forming electric fields.</li> </ul>	<ul style="list-style-type: none"> <li>•What are the similarities and differences between gravity and electric fields?</li> <li>•How does the presence of an electric field interrelate to motions of charges, forces, and work on charges?</li> </ul>	<p>Have the students act as engineers. Design and build a large capacitor. The student needs to build the largest value (Farad) capacitor that can fit inside a film canister. The capacitor will be tested in an oscillator circuit for results.</p>
<p>European Exploration of Meso America</p>	<ul style="list-style-type: none"> <li>•Knowledge increases a civilization’s desire/need for contact with other civilizations.</li> <li>•There are positive and negative results of interaction between civilizations.</li> </ul>	<ul style="list-style-type: none"> <li>•What impact do new technologies and inventions have on society?</li> <li>•What is a civilized society?</li> <li>•When are influences positive and negative?</li> </ul>	<p>Goal: Determine if a specific area of Meso America has been positively or negatively affected by European exploration. Students act as a sociologist that will determine if a specific part of Meso America has been positively or negatively impacted by European exploration. They will present their findings in a written report and power point presentation.</p>
<p>“Flowers for Algernon” – Daniel Keys</p>	<ul style="list-style-type: none"> <li>• Life changing decisions often involve moral questions that must be thought out carefully.</li> <li>•People’s frames of reference</li> </ul>	<ul style="list-style-type: none"> <li>•How does a person’s level of intelligence relate to his/her worth in society?</li> <li>•What are the benefits of failure?</li> </ul>	<p>You are a graduate student research assistant with Howard Gardner. As an Emmaus graduate, you have been asked to make a presentation to the East Penn School Board. Several prominent community members</p>

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	<p>determining how they interpret and appreciate literature.</p> <ul style="list-style-type: none"> <li>• In helping others with moral questions, being persuasive plays a crucial role.</li> </ul>	<ul style="list-style-type: none"> <li>• How does a person's frame of reference affect how he/she makes decisions?</li> </ul>	<p>will be attending. Develop a persuasive report in order to convince the school board and the community members to forgo traditional IQ testing in favor of using Gardener's Assessments as the accurate and reliable means of gauging students; true intelligence. Gain the trust of the community and remember that I is a school board election year.</p>
Food Science And Nutrition	<ul style="list-style-type: none"> <li>• What you eat and how you prepare what you eat will determine how you look and feel and perform.</li> <li>• When you learn how to prepare food, you increase your appreciation of it.</li> </ul>	<ul style="list-style-type: none"> <li>• How do you read and analyze a food label?</li> <li>• How do we know how much to eat and how to control our weight</li> <li>• How do you plan a well balanced menu using the Dietary Guidelines and the Food Guide Pyramid?</li> <li>• How does one prepare foods in a nutritious, wholesome way?</li> </ul>	<p>Students will role-play a situation involving a client who has a dietary problem. Students will pair up. One student will act as the certified dietitian and the other student will act as the client. They will jointly decide what problem the client has. It may be an athlete's eating plan designed for a football player, a diet for a diabetic, a low sodium diet, low cholesterol diet, a plan for a bulimic patient or one with anorexia nervosa. It may also be a weight reduction diet or a weight-gain eating plan. Eating plans and diets must be approved by the American Dietetic Association. The dietitian will counsel the client by explaining all facets of the condition and the special concerns related to it.</p>
Genetics	<ul style="list-style-type: none"> <li>• The physical, chemical and behavioral characteristics of ALL organisms are influenced by DNA.</li> </ul>	<ul style="list-style-type: none"> <li>• Is behavior more strongly influenced by nature or nurture?</li> <li>• How is the information encoded by your DNA expressed?</li> <li>• What is the role of DNA in evolution?</li> <li>• Are genetically engineered organisms the wave of the future?</li> </ul>	<p>As a genetic counselor, parents would like you to show them on paper, using a series of tri-generational pedigrees (at least), what physical characteristics their child would most likely possess. Also, they would like to know what genetically linked diseases you might encounter throughout life (i.e. diabetes, breast cancer, etc.) The clients expect to be informed of at least 10 potential characteristics (6 physical, 4 disease related) in a clearly understandable manner. Your stipend will be based upon the number of traits you are able to clearly explain!!</p>

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<p>Geography of Nile River</p>	<ul style="list-style-type: none"> <li>• Geography determines or influences civilizations.</li> </ul>	<ul style="list-style-type: none"> <li>• How does geography shape the development of a civilization?</li> <li>• In what ways were civilizations forced to adapt to their geographic environment?</li> </ul>	<p>Video Presentation</p> <p>Present an Egyptian newscast focusing on the effects of the flooding of the Nile. Anchor person, weather person and location person were part of the team. Students need to create background, costumes, name of show for video presentation</p>
<p>Going to the Café</p>	<ul style="list-style-type: none"> <li>• Cultural differences and similarities exist.</li> <li>• Each language has its own pattern of speech and structure.</li> <li>• In order to communicate it is not necessary to know every word (Use what you know.)</li> </ul>	<ul style="list-style-type: none"> <li>• Is mastery of a language necessary to effectively communicate the essence of a message?</li> <li>• To what extent are grammar and vocabulary needed to communicate effectively?</li> <li>• Is culture an integral part of language learning?</li> </ul>	<p>You are a first year language student in the target culture with your school group. Your teacher gives you one hour for lunch. Your task is to go into a restaurant, find a table, ask for a menu, order your food and drink and ask for the bill. You will be talking to the people at your table and the waiter or waitress. A partner will play the roles of the waiter/waitress and restaurant customers, but this name will be randomly drawn. You will also once have to assume the partner role.</p>
<p>Health/Wellness</p>	<ul style="list-style-type: none"> <li>• Eating healthy contributes to good physical/mental health.</li> <li>• Dietary guidelines provide information to help make good choices.</li> <li>• Sound nutritional practices have lifelong effects on healthy.</li> <li>• Metabolism, age, activity level, and health issues are impacted by one's diet.</li> </ul>	<ul style="list-style-type: none"> <li>• Why are you what you eat?</li> <li>• What impact does societies image of the 'perfect body' have on our present day eating habits?</li> <li>• Why do Americans ignore dietary guidelines despite health repercussions?</li> </ul>	<p>Your task is to develop a T.V. dinner for senior citizens living on a fixed income. You are a nutritional engineer working for a major food supplier. It is important that the dinner meet the nutritional needs of the elderly. It is also very important that the product looks good, taste good, and costs little. Create a sample packaged dinner.</p>
<p>How Do Food Concerns Impact Food Choices (How Does What I Eat Tell You Who I Am)?</p>	<ul style="list-style-type: none"> <li>• Food concerns have far reaching effects and consequences;</li> <li>• Food concerns require choices among ideas/values and needs/wants;</li> <li>• Food concerns occur throughout history;</li> <li>• Food concerns are multifaceted, complex, cyclical, and cultural.</li> </ul>	<ul style="list-style-type: none"> <li>• How do food concerns impact food choices</li> <li>• How does technology affect food production and consumption?</li> <li>• How does food reflect culture?</li> <li>• How do Language Arts representations influence food choices?</li> <li>• How do family lifestyles influence food consumption?</li> <li>• How does one's definition of wellness drive food choices?</li> <li>• How do food norms differ with cultures?</li> </ul> <p>How can I eat more and still be healthy?</p>	<p>You are a PSU agricultural representative. You are contacted by a group of farmers concerned with poor crop productivity. They want you to propose an action plan which will identify the problem, the action to be taken, the environmental impact, and the possible results.</p>

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		<p>How does food marketing influence food trends?</p> <p>How do administrative decisions affect student eating habits?</p>	
Ideological Conflict	<ul style="list-style-type: none"> <li>• Ideological conflicts are inevitable.</li> <li>• There are alternative ways to address conflicts.</li> </ul> <p>Resolution/victory is difficult to define in ideological conflict.</p>	<ul style="list-style-type: none"> <li>• Are ideological conflicts inevitable?</li> <li>• What alternatives are available to address ideological conflict?</li> <li>• How do you defeat an ideology?</li> <li>• When is it necessary to go to war?</li> <li>• How is foreign policy developed?</li> <li>• How do you know when you have “won” an ideological conflict?</li> </ul>	<p>A variety of foreign policy experts have been called to publicly debate the most effective policy, to deal with Muslim fundamentalist ideology.</p> <p>In preparation and during this debate you will need to:</p> <ul style="list-style-type: none"> <li>• Select a strategy which comes from traditional American policies for dealing with opposing ideology as found in the Cold War.</li> <li>• Develop an opening statement which connects the chosen strategy to the historical contextual success and explain why it would work in the present situation.</li> <li>• Prepare which would challenge anticipated opposing views.</li> <li>• Anticipate and prepare to answer questions which attack your point of view/</li> <li>• Distill your argument in a rebuttal which takes into account the opposition’s positions and purposefully discredit them.</li> </ul>
Matter	<ul style="list-style-type: none"> <li>• Changes at a subatomic level impact on the microscopic and macroscopic level.</li> <li>• Scientific models have changed over time, as technology has developed.</li> </ul>	<ul style="list-style-type: none"> <li>• How can changes at a subatomic level affect the visible world?</li> <li>• Does technological development change scientific thought? Or does scientific thought drive technological development?</li> </ul>	<p>You will be creating a visual representation about Matter and Energy for other students. You may create a comic book or an animated short to explain how the ideas about these have changed over time.</p> <p>You will introduce a new character “Ernie Election,” that acts out how the view of himself has changed over the years.</p>



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<p>Meaning in Lit./ Effective Communication</p>	<ul style="list-style-type: none"> <li>• The most engaging speakers use volume, pacing and clarity of speech to effectively reach an audience.</li> <li>• Sometimes characters in fiction represent groups of real people, and their problems represent common situations found in life.</li> </ul>	<ul style="list-style-type: none"> <li>• If we look at an audience during an oral presentation, without hearing the speaker ourselves, are there ways we can tell whether the speaker is effective or ineffective?</li> <li>• How can a speaker even with an interesting topic, “lose” his audience?</li> <li>• How can an author use an animal to represent a person in a story?</li> <li>• How can we tell that a problem faced by a character represents a common situation that may be faced by real people?</li> </ul>	<p>Read a selected allegory and find the moral within it. THEN ... you are the father/mother of a young child. Your task is to write a story to be read aloud (about 60 sec.) to your child at bedtime. This story should feature human characters who bring forth a moral similar to the one in our selected allegory. REMEMBER ... you want to entertain your child, but you also want to make sure he/she understands the story. And you want to take a minute, more or less to discuss the moral with your child.</p>
<p>Multimedia To Engage Learners</p>	<ul style="list-style-type: none"> <li>• The major function of multi-media is to enhance teaching and learning.</li> <li>• Multi-media is an effective and efficient means of demonstrating student success.</li> <li>• Multi-media engages student learning</li> </ul>	<ul style="list-style-type: none"> <li>• What is multi-media?</li> <li>• What engages student learning?</li> <li>• Does multi-media always enhance student learning?</li> <li>• How could multi-media be used to demonstrate and assess student learning?</li> </ul>	<ul style="list-style-type: none"> <li>• Create and present a lesson that uses multi-media to engage learners.</li> <li>• Demonstrate a teaching style that engages learning.</li> <li>• Self-assess your teaching with multi-media styles and list ways that you can include alternative styles to engage learners.</li> </ul>
<p>Native American Art</p>	<ul style="list-style-type: none"> <li>• We don't need formal training to do art.</li> <li>• Artwork reflects the culture of the people.</li> <li>• Art can be influenced by resources.</li> <li>• Artwork provides us with information about culture.</li> <li>• Social groups influence styles of art</li> <li>• Art changes with time, people's ideas and resources.</li> </ul>	<ul style="list-style-type: none"> <li>• What is more lasting -- folk art or fine art?</li> <li>• Does form follow function or visa versa?</li> <li>• Are natural resources a factor in art work?</li> <li>• Is the social environment or natural environment more influential?</li> </ul>	<p>Create a Native American Style Vessel based on styles of a certain tribe researched that illustrates its culture, origin and language. Present an argument lesson to the officials of Lenape Art Museum on why your work should be included in the collection.</p>

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<p>Oscar Wilde's <i>Importance of Being Earnest</i></p>	<ul style="list-style-type: none"> <li>• Different social mores impact on social classes.</li> <li>• Peoples actions dictate others' opinions of them.</li> <li>• In a society different classes influence e its effectiveness.</li> <li>• A writer pulls from his surroundings to develop his craft.</li> <li>• A writer can bring himself into his work to enhance style.</li> </ul>	<ul style="list-style-type: none"> <li>• How does a writer personalize his work and develop his own style?</li> <li>• Do we have a caste system today?</li> <li>• What influences a writer?</li> <li>• How does a writer personalize his work and develop his own style?</li> </ul>	<p>You are seeking employment at an off beat greeting card company. You need to create anew line of cards aimed at poling fun of a current problem in the country. Develop a card, the front cover being a scene or target area of satire; the inside, an epigram and a satirical finish. You will need a paragraph of explanation to show strength of satire.</p>
<p>Periodic Table</p>	<ul style="list-style-type: none"> <li>• The periodic table is used to predict and explain the chemical behavior of matter.</li> </ul>	<ul style="list-style-type: none"> <li>• How is the periodic table arranged?</li> <li>• What does the periodic table enable in terms of prediction?</li> <li>• What criteria predict the behavior of an element?</li> <li>• How would scientists use the periodic table?</li> </ul>	<p>Create a brochure advertising the periodic table. The brochure must convince a client of the various ways the periodic table is used in scientific work. It must also include "testimonials" of specific kinds of discussions that can be made by using the table. The brochure must also include illustrations which help describe the organization and chemical trends.</p>
<p>Persuasion</p>	<ul style="list-style-type: none"> <li>• Persuasion is a valuable life-long tool used to convince others of their position/point of view using supporting evidence.</li> </ul>	<p>How do you select valid supportive evidence to align with a position?</p> <ul style="list-style-type: none"> <li>• What strategies do effective persuasive writers use to convince their audience of their point of view?</li> </ul>	<p>Students will write a persuasive essay that will use supporting evidence to convince others of their position. Students will react to a newspaper article about financial responsibility of a car accident.</p>
<p>Persuasive Writing</p>	<ul style="list-style-type: none"> <li>• Writing is a process that includes brainstorming, drafting, revision editing, and may include publishing.</li> <li>• Writing is an essential form of communication.</li> <li>• We write for a variety of purposes and audiences.</li> <li>• Effective writers have a repertoire of strategies.</li> <li>• Effective writing incorporates the qualities of style, focus, content, organization and conventions.</li> </ul>	<ul style="list-style-type: none"> <li>• How do effective writers hook and hold their readers (focus, content, organization)?</li> <li>• How do effective writers persuade their audience (fact/opinion, compare/contrast, style)?</li> <li>• When would a writer use persuasive writing (editorials, letters, format)?</li> <li>• How do writers analyze, revise, and edit work to make it more effective in communicating the intended message of thought (importance of revision and editing)?</li> </ul>	<p>We have been reading and discussing a number of newspaper articles having to do with school and community issues. Select one about which you have strong feelings and write a letter convincing the audience of your point of view. Use business letter format. Your letter will be assessed based on the Writing Rubric. Your goal is to write such a powerful letter that you get a response (written response, phone call, publication) from your readers.</p>
<p>Photo-synthesis</p>	<ul style="list-style-type: none"> <li>• Photosynthesis and Respiration are opposites of</li> </ul>	<ul style="list-style-type: none"> <li>• How are the end products of respiration recycled in</li> </ul>	<p>The president of the United States has contacted your lab. He has employed you to create a new plant</p>

### Examples of Unit Outlines: Questions, Understandings, Task Ideas

<p>and Respiration</p>	<p>each other and make up a complex biochemical pathway.</p> <ul style="list-style-type: none"> <li>•Photosynthesis produces food and oxygen by using carbon dioxide and energy from the sun.</li> <li>•Cellular respiration breaks down food into usable energy (ATP) in the presence or absence of oxygen.</li> </ul>	<p>photosynthesis and vice versa?</p> <ul style="list-style-type: none"> <li>•How is ATP formed in the food you eat?</li> <li>•Could life exist without plants?</li> </ul>	<p>species. However, due to a rapidly spreading wildfire, a cloud of smoke has blocked the sun out. So this new plant must be able to grow and produce food using minimal sunlight. Create a blueprint of your new plant, what its growth requirements are, how you will create it and how readily available it is.</p>
<p>Political and Economic Systems</p>	<ul style="list-style-type: none"> <li>• The values of a society form the basis of its government and economic structure.</li> <li>•Scarcity drives government to make decisions about the distribution of resources.</li> </ul>	<ul style="list-style-type: none"> <li>•How do a society's values influence its economic and political structure?</li> <li>•Why is there scarcity?</li> <li>•Why do some nations experience more scarcity than others?</li> </ul>	<p>The U.N. has put you in contact with a group of people who want input in creating the best functioning economic system. Since you are an economic advisor well versed in the benefits and weaknesses of many economic systems, the new leaders would like your evaluation of the best ideas from all of these structures. The leaders specifically would like a blueprint of an economic system that includes specific ideas and justification of each element as well as the system as a whole.</p>
<p>Pre-Revolutionary War Times Colonies/ British 1763-1775</p>	<ul style="list-style-type: none"> <li>• Revolution is a change in government brought forth by conflict.</li> <li>•Well-intended government policies often go awry.</li> <li>•People's actions and reactions often reflect a need to protect their ideas and beliefs.</li> </ul>	<ul style="list-style-type: none"> <li>•What injustices have you faced in your life?</li> <li>•To what degree are you willing to defend your beliefs?</li> <li>•What could bring forth revolution in our country today?</li> </ul>	<p>You will be asked as an editor to create a New England colonial magazine that has to persuade loyalists and undecided citizens of New England to join the cause for freedom. Your magazine will be five pages in length – each page covering an aspect of the unit of study. Page one is a cover including a political cartoon. Page two will be an editorial column. Page three includes a news article. Page four is an advertisement supporting patriotic groups, and page five is an interview report. Your grade will come from standard point values and rubrics.</p>

## Examples of Unit Outlines: Questions, Understandings, Task Ideas

Real World Applications of Problem Solving	<ul style="list-style-type: none"> <li>•Equation solving can be used in everyday life.</li> <li>•Equation solving through applications creates a more efficient system for learning higher level mathematics.</li> </ul>	<ul style="list-style-type: none"> <li>• Can you illustrate several different algebraic equations from a real life application?</li> <li>• How can you use variables in real life situations to solve problems?</li> </ul>	When contractors give us an estimate on home improvements, how can we tell if the cost is reasonable? You have been asked by a homeowner to submit an estimate for the cost of a rectangular patio. The patio must be built using a fixed budget and must comply with local building codes. Create a detailed sketch(s), building a maximum sized patio on this fixed budget while using the local building code restrictions. (Students will be given code restrictions, cost figures for materials, labor costs and a 20% builder profit). Be sure to show all calculations so that the homeowner will be able to understand your conclusion.
Settlement to In-dependence	<ul style="list-style-type: none"> <li>•People want some form of representation in government.</li> <li>•There are two sides to every story/conflict.</li> <li>•People settle where resources are available.</li> </ul>	<ul style="list-style-type: none"> <li>•Why do people want government representation?</li> <li>•Why do people seek independence?</li> <li>•Why are some locations on which to settle more favorable than others?</li> <li>•What would life be like if the colonists hadn't declared independence?</li> <li>•Why did Loyalists and Patriots disagree on certain issues?</li> </ul>	(Three Person Project) You are a moderator, loyalist or patriot on a weekly news show. Your job is to be part of a debate between a Patriot/Loyalist. As the moderator your job will be to have participants give their points of view in a dignified manner with both sides having equal say. The debate members must argue conflict issues and have evidence to support their side. The audience is T.V. viewers in the United States and great Britain.
Similar Figures	<ul style="list-style-type: none"> <li>•Proportional reasoning is useful in various situations to show relationships between similar figures.</li> </ul>	<ul style="list-style-type: none"> <li>•When do we need proportions?</li> <li>•In what ways are proportions used in everyday life?</li> </ul>	Write a letter to your parents explaining why you need a bigger bedroom. Include the actual dimensions of your bedroom, the actual dimensions of the bases of all the objects in your bedroom, a scale drawing showing what one inch equals in feet, and the proportions you used to convert the actual dimension to your scale.
Sonnets	<ul style="list-style-type: none"> <li>•Poetry is an elastic form of communication and self expression that can address a variety of audiences.</li> <li>•Poetic forms and subjects change over time.</li> </ul>	<ul style="list-style-type: none"> <li>•What makes a great poem?</li> <li>•Why do poets use different poetic forms?</li> <li>•What is the relationship between "sound and sense:"?</li> <li>•How do great poets develop their themes, voices and images?</li> </ul>	You are the newly selected Poet Laureate of the E.U. and have been commissioned to write a sonnet about 9/11 and the ensuing events in the Middle East. You are to read it on <b>Al Jezura</b> , (NN), BBC, and you will be published in <b>Aris Newyc</b> . Your goal is to promote empathy and understanding between the West and the Islamic World. Use poetic devices, avoid clichés, and be aware that this poem will be translated.
Statistic & Data Analysis	<ul style="list-style-type: none"> <li>•Being able to analyze data meaningfully leads to the ability to apply results of investigations.</li> <li>•Scrutinizing representations of data leads to informed decision</li> </ul>	<ul style="list-style-type: none"> <li>•What is an appropriate way to organize data?</li> <li>•How do we benefit from data analysis?</li> <li>•What is a good data analysis and why is it important?</li> </ul>	The task is to go before the school board to get a school rule changed. The student will need to prepare an oral presentation supported by visual aids (graphs) to persuade the board. Students will need to gather a representative sample of data, compile several types of graphs and measures of control tendency, and choose

**Examples of Unit Outlines: Questions, Understandings, Task Ideas**

	making and logical conclusions		graphs and analysis that best support their persuasive argument.
Statistical Analysis and Interpretation	<ul style="list-style-type: none"> <li>•Statistics involves making conjectures, collecting, and organizing data, interpreting the data, and explaining the reasons behind the findings.</li> </ul>	<ul style="list-style-type: none"> <li>•What is the process used to organize data and reach conclusions?</li> <li>•How are statistics used to support the decision making process?</li> <li>•How can you manipulate statistics to present a biased viewpoint?</li> </ul>	You are a member of a community has a piece of land that is going to be developed. The land will be transformed into either an industrial park or a recreational park. You need to adopt one of the two purposes and develop a proposal in support of that goal. You need to prepare a statistically appropriate proposal with visuals to convince township supervisors to use the land to your advantage.
The Cause and Effect Essay/ Narrative	<ul style="list-style-type: none"> <li>•Personal experiences illustrate cause and effect situations.</li> <li>•Being older doesn't necessarily mean being wiser.</li> <li>•They can use cause and effect approach to write essays and solve problems in all subject areas.</li> <li>•They must use organizational patterns appropriate to the type of composition.</li> <li>•It's important to state a clear purpose and engage the interest of the reader.</li> </ul>	<ul style="list-style-type: none"> <li>•Why/how do personal experiences illustrate cause and effect relationships?</li> <li>•Can childhood experience/incident effect an individual as an adult?</li> <li>•Does being older necessarily mean being wiser?</li> <li>•Can different responses to causes create different effects?</li> <li>•Can a positive effect result from a negative cause (or visa versa)?</li> <li>•How can the cause and effect approach be used in other subject areas?</li> <li>•How do you structure a cause and effect essay?</li> <li>•Why is it important to consider audience when writing a cause and effect essay?</li> </ul>	After reading and discussing the Cisneros short story, "Eleven", write a cause and effect narrative based on a personal experience. Write in first person point of view and be prepared to share your narrative with the class. You will need to choose a scenario, gather details, connect your ideas, check for style and accuracy, and prepare a final copy of your cause and effect narrative.

### Examples of Unit Outlines: Questions, Understandings, Task Ideas

The Great Depression	<ul style="list-style-type: none"> <li>•The Depression affected the structure and function of families.</li> <li>•The Depression caused a shift in the role of Government.</li> </ul>	<ul style="list-style-type: none"> <li>•Should the Government play a role in a nation’s economy?</li> <li>•How can economic fluctuations be both beneficial and detrimental to society?</li> </ul>	Create a video documentary/interview of a variety of people who can answer insightful questions about their experiences in the Great Depression.
The Water Is Wide	<ul style="list-style-type: none"> <li>• Discrimination is rethought when an individual walks in another’s shoes.</li> <li>•Discrimination is multi layered.</li> <li>•Acceptance does not end discrimination.</li> </ul>	<ul style="list-style-type: none"> <li>•Can you really walk in another’s shoes?</li> <li>•Have laws “enabled” discrimination?</li> <li>•How do cultural factors impact tolerance and discrimination?</li> </ul>	You are a photo journalist who wants to see an article in Time Magazine on Pat Conroy and his experiences living on Yomarrow Island (an African American community.) Since this is a national magazine give a broad overview of his life during that year on the island. Please include photographs and interview quotes, etc. Quizzes, tests, oral dis -cussion on various writings such as journal entries
Tools of Biology	<ul style="list-style-type: none"> <li>•Scientific knowledge and advancement is based on processes that ultimately lead to theory development.</li> </ul>	<ul style="list-style-type: none"> <li>•What makes science “science”?</li> <li>•How does scientific knowledge advance?</li> <li>•How does the scientific concept of theory differ from the commonly used concept of theory?</li> </ul>	You are a member of a team of biological research scientists. Your funding is going to be cut off unless you can defend your scientific research practices to the funding agency and its CEO. You need to explain the research project you have designed, conducted and interpreted in both an oral presentation and research report to the funding source. You must follow the guidelines of the funding agency for both the presentation and report.
U.S. Constitution	<ul style="list-style-type: none"> <li>• Governments are created as a means of organizing power to meet the needs of the people.</li> <li>•Democratic ideals are used to protect the individual from the government’s abuse of power.</li> <li>•Government must carry out three functions; make laws, interpret laws, enforce laws.</li> </ul>	<ul style="list-style-type: none"> <li>•If a democracy is such an ideal form of government, why do so many democracies, fail or fail to exist?</li> <li>•Is the United States a true democracy?</li> <li>•To what degree did the framers of the Constitution believe in democratic principles?</li> <li>•What conditions are necessary for a democratic government to exist?</li> </ul>	Your task is to create a Constitution for a developing country based on early American democratic principles. You will be assigned a role to play as a delegate to a Constitutional Convention. Your challenge will involve creating a new democratic government to meet the needs of your country. You must work with fellow delegates to create a written Constitution to ensure individual rights and freedom from the possible abuse of governmental power. A successful Constitution must be accepted by a majority of the delegates and secure the protections and goals of your constituents.

### Examples of Unit Outlines: Questions, Understandings, Task Ideas

Under- standing Through Tolerance	<ul style="list-style-type: none"><li>•Parallels exist among the three major “revealed” religions.</li><li>•Tolerance is necessary for a peaceful existence in our global culture.</li><li>•Individuals can find happiness within themselves.</li></ul>	<ul style="list-style-type: none"><li>•How does one’s culture, religion, and government relate to happiness/peace?</li><li>•How do we learn tolerance for others?</li></ul>	Your task is to argue a side of a court case involving First Amendment freedoms. You are a lawyer arguing the case you have been assigned. Your audience is the Supreme Court, and you must convince them to side with your case. You will create a 2 minute presentation that outlines your case. You are responsible for the background (including knowing your oppositions case) and specific circumstances supporting your case.
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## GIPS 3<sup>rd</sup> Grade Mathematics Design Map

Units (in sequence)	Estimated Time Frame (days)	K-12 Program Strands with Corresponding Course/Grade Level (or Unit) Standards	K-12 Program Enduring Understandings	K-12 Program Essential Questions (for process only)	Assessments (note if optional)	C/GL Key Vocabulary Concepts
<b>Unit 1 Sampling and Classifying</b>	9 days Aug. 19-29	<p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p>3.2 Algebraic Relationship                      Identify and solve for variables in addition and subtraction (two digit numbers)</p> <p>Data Analysis, Probability, &amp; Stats:  <b>5.1 Data Organization</b>                      Collect, organize, graph, and analyze data from given samples</p> <p>5.2 Data Analysis                      Use data in tables and graphs to make predictions and solve problems</p>	<p>Mathematicians formulate equations or functional relationships to communicate generalizations (general patterns, rules, and connections to prior concepts that are at the core of the problem) so that specific problems can be solved more efficiently.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p>	<p><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>DPP - Q &amp; S (fluency- Strand 2)</p> <p>Lisa's Class Graph URG 29 (Strands 3 &amp; 5)</p> <p>Careless Professor Peabody URG 30 (Strands 3 &amp; 5)</p> <p>DPP - P (Strand 3)</p>	<p><b>Number &amp; Operations</b> digit</p> <p>thousands</p> <p>multiplication</p> <p>product</p> <p>fraction</p> <p><b>Geometry, Spatial Concepts, &amp; Measurement</b> congruent</p> <p>symmetry</p> <p>area</p> <p>perimeter</p> <p>vertex</p> <p>right angle</p> <p>volume by displacement</p> <p><b>Data Analysis</b> median</p>
<b>Unit 2 Strategies- An Assessment Unit</b>	11 days Sept 2 -16	<p><b>Number Sense</b>  <b>2.2 Number Relationships</b>                      Add and subtract two and three digit numbers</p> <p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p>Data Analysis, Probability, &amp; Stats:  <b>5.3 Probability</b>                      Collect, organize, graph, and analyze data from given examples</p> <p><b>5.2 Data Analysis</b>                      Use data in tables and graphs to make predictions and solve problems</p>	<p>The ability to express the relationship amongst sets of numbers provides the foundations for the rules that govern arithmetic and algebra.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p> <p>Choices in data collection (sampling being used and strategy for how to collect it) affect their validity, interpretation and use.</p>	<p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>Calculator Challenges URG 29 (Strands 2 &amp; 3)</p> <p>DPP - N (Strands 2 &amp; 3)</p> <p>DPP - X (Strands 3 &amp; 4)</p>	<p><b>Geometry, Spatial Concepts, &amp; Measurement</b> congruent</p> <p>symmetry</p> <p>area</p> <p>perimeter</p> <p>vertex</p> <p>right angle</p> <p>volume by displacement</p> <p><b>Data Analysis</b> median</p>



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Unit 3 <b>Exploring Multiplication</b>	7 days Sept. 17-25	<b>Number and Operation:</b> <b>2.1 Number Sense</b> Partition large numbers into two and three parts and represent them with number sentences  <b>2.2 Numerical Relationships</b> Represent multiplication using stories, number lines, data tables, pictures, and arrays  <b>Data Analysis, Probability, &amp; Stats:</b> <b>5.1 Data Organization</b> Collect, organize, graph, and analyze data from given samples  <b>5.2 Data Analysis</b> Use data and Graphs	Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.  The problem in front of you is a member of a family of problems.  Numerical representations can be used to describe quantitative relationships.  Data illustrate relationships so inferences and predictions can be made and actions can be taken.	<b>Communicating Mathematical Thinking</b>  What do I visualize when I look at this problem?  What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?  What do I do when I get stuck?  Does my solution make sense?  How do I best show my thinking?  What information do I have? What information do I need? How do I get that information?	Home Practice Part 2 – DAB p. 46 Part 4 – DAB p. 47 (Strands 2 & 3)  DPP - C & G (strand 2 fluency)  DPP - N (strand 2)	<b>Number &amp; Operations</b> digit  thousands  multiplication  product  fraction  <b>Geometry, Spatial Concepts, &amp; Measurement</b> congruent  symmetry  area  perimeter  vertex  right angle  volume by displacement  <b>Data Analysis</b> median
		<b>Number and Operations:</b> <b>2.1 Number Sense</b> Partition large numbers into two and three parts and represent them with number sentences  Read and write numbers up to 1000 using words, digits, and symbols  Compare and order large numbers to the 10,000s place  <b>Geometry, Spatial Concepts, and Measurements:</b> <b>4.4 Measurement Process and Use</b> Tell time to the nearest minute using an analog and digital clock				

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<b>Unit 5 Area of Different Shapes</b>	8 days Oct. 20-29	<p>Geometry, Spatial Concepts, and Measurement: 4.5 Measurement Applications Estimate and measure area of regular and irregular shapes using square centimeters</p> <p>Data Analysis, Probability, &amp; Stats: <b>5.1 Data Organization</b> Collect, organize, graph, and analyze data from given examples</p> <p><b>5.2 Data Analysis</b> Use data in tables and graphs to make predictions and solve problems</p>	<p>The language of geometry allows us to communicate in a precise and efficient manner.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p> <p>Choices in data collection (sampling being used and strategy for how to collect it) affect their validity, interpretation and use.</p>	<p>Communicating Mathematical Thinking</p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p>	DPP - M (Strand 4)	<p><b>Number &amp; Operations</b></p> <p>digit</p> <p>thousands</p> <p>multiplication</p> <p>product</p> <p>fraction</p>
		<p>Numbers and Operations: 2.2 Number Relationships Add and subtract two and three digit numbers</p> <p><b>2.3 Estimation</b> Estimate sums and differences to hundreds</p>	<p>Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>Estimating the answer to a problem helps mathematicians predict the reasonableness of a solution.</p>	<p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>		<p>Student Guide pg. 70 (Strand 2)</p> <p>DAB – pg. 108 (Strand 2)</p> <p>DPP - N &amp; AA (Strand 2)</p>

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<b>Unit 7</b> <b>Exploring</b> <b>Multiplication</b> <b>&amp; Division</b>	11 days Nov. 24- Dec. 10	<p>Number and Operations:  <b>2.2 Numerical Relationships</b>                      Represent multiplication using stories, number lines, data tables, pictures, and arrays</p> <p>Algebraic Concepts:  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p>Find locations on grids or locate objects using positive coordinates</p> <p>Geometry, Spatial Concepts, and Measurement:  <b>4.5 Measurement Application</b>                      Measure perimeter of regular and irregular two-dimensional shapes in centimeters</p> <p>Solve problems with or without a collection of coins and paper money up to twenty-five dollars</p>	<p>Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Mathematicians communicate through words, numbers, graphs and symbols, moving fluently from one representation to another as the situation requires.</p> <p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p> <p>Standard units of measure allow us to describe objects, interpret events and make comparisons in a way that can be universally understood.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>Katie's Job                      URG pgs. 39 &amp; 40                      (strands 2,3,&amp; 4)</p> <p>DPP - B                      (strand 2)</p> <p>DPP - U                      (strand 2 fluency)</p> <p>Walking Around Squares                      DAB p. 127-128                      (strands 3 &amp; 4)</p> <p>Professor Peabody's Shapes                      URG p. 70                      (strands 3 &amp; 4)</p>	<p><b>Number &amp; Operations</b>                      digit                      thousands                      multiplication                      product                      fraction  <u>Geometry, Spatial Concepts, &amp; Measurement</u>                      congruent                      symmetry                      area                      perimeter                      vertex                      right angle                      volume by displacement  <b>Data Analysis</b>                      median</p>
<b>Unit 8</b> <b>Mapping &amp; Coordinates</b>	7 days Dec. 11-19	<p><b>Algebraic Concepts:</b>  <b>3.2 Algebraic Relationships</b>                      Find locations on grids or locate objects using positive coordinates</p> <p><b>Geometry, Spatial Concepts, and Measurement:</b>  <b>5.1 Data Organization</b>                      Draw and measure the dimensions of a rectangle to the nearest centimeter</p>	<p>Mathematicians communicate through words, numbers, graphs and symbols, moving fluently from one representation to another as the situation requires.</p> <p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p>	<p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>DPP - M                      (strand 2 fluency)</p> <p>Maps-                      URG 45 &amp; 46                      (strands 3 &amp; 5)</p>	<p><b>Data Analysis</b>                      median</p>

### GIPS 3<sup>rd</sup> Grade Mathematics Design Map

Units (in sequence)	Estimated Time Frame (days)	K-12 Program Strands with Corresponding Course/Grade Level (or Unit) Standards	K-12 Program Enduring Understandings	K-12 Program Essential Questions (for process only)	Assessments (note if optional)	C/GL Key Vocabulary Concepts
Unit 9 <b>Using Patterns to Predict</b>	7 days Jan. 5-13	<p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><b>Data Analysis, Probability, &amp; Stats:</b>  <b>5.1 Data Organization</b>                      Collect, organize, graph, and analyze data from given samples</p> <p><b>5.2 Data Analysis</b>                      Use data in tables and graphs to make predictions and solve problems</p>	<p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p> <p>Choices in data collection (sampling being used and strategy for how to collect it) affect their validity, interpretation and use.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p>	<p>Balancing Masses URG 23 &amp; 24 (strands 2,3,4 &amp; 5)</p> <p>Robin's Marbles URG 38 (strands 2,3,4,&amp; 5)</p> <p>DPP - I (strand 3)</p> <p>DPP - M (strand 2 fluency)</p>	<p><b>Number &amp; Operations</b> digit thousands multiplication product fraction</p> <p><u>Geometry, Spatial Concepts, &amp; Measurement</u> congruent symmetry area perimeter vertex right angle volume by displacement</p> <p><b>Data Analysis</b> median</p>
Unit 10 <b>Numbers &amp; Patterns An Assessment Unit</b>	7 days Jan. 14-22	<p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><b>3.2 Algebraic Relationships</b>                      Identify and solve for variables in addition and subtraction (two digit numbers)</p> <p><b>Data Analysis, Probability, &amp; Stats:</b>  <b>5.1 Data Organization</b>                      Collect, organize, graph, and analyze data from given samples</p> <p><b>5.2 Data Analysis</b>                      Use data in tables and graphs to make predictions and solve problems</p>	<p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Mathematicians communicate through words, numbers, graphs and symbols, moving fluently from one representation to another as the situation requires.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p> <p>Organization of data creates context so that what seems random may be quite predictable.</p>	<p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>Midyear Test URG 52-58 (strands 2,3,4,&amp; 5)</p> <p>DPP - I &amp; K (strand 2 fluency)</p>	<p><b>Data Analysis</b> median</p>

## GIPS 3<sup>rd</sup> Grade Mathematics Design Map

Units (in sequence)	Estimated Time Frame (days)	K-12 Program Strands with Corresponding Course/Grade Level (or Unit) Standards	K-12 Program Enduring Understandings	K-12 Program Essential Questions (for process only)	Assessments (note if optional)	C/GL Key Vocabulary Concepts
Unit 11 <b>Multiplication Patterns</b>	10 days Jan. 23- Feb. 5	<p><b>Number and Operations:</b>  <b>2.1 Number Sense</b>                      Partition large numbers into two and three parts and represent them with number sentences</p> <p><b>2.2 Numerical Relationships</b>                      Represent multiplication using stories, number lines, data tables, pictures, and arrays</p> <p>Develop fluency with multiplication facts</p> <p>Identify and write number sentences for fact families for multiplication and division</p> <p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><b>Geometry, Spatial Concepts, and Measurement:</b>  <b>4.5 Measurement Applications</b>                      Solve problems with or without a collection of coins and paper money up to twenty-five dollars</p>	<p>Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>The problem in front of you is a member of a family of problems.</p> <p>The ability to express the relationship amongst sets of numbers provides the foundations for the rules that govern arithmetic and algebra.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Standard units of measure allow us to describe objects, interpret events and make comparisons in away that can be universally understood.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before? How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize an apply mathematics in my life?</p>	<p>DAB p. 161 (stand 2)</p> <p>Student Guide pg. 154 (strand 2)</p> <p>DPP - A DPP - P DPP - S (strand 2)</p>	<p><b>Number &amp; Operations</b> digit thousands multiplication product fraction</p> <p><b>Geometry, Spatial Concepts, &amp; Measurement</b> congruent symmetry area perimeter vertex right angle volume by displacement</p> <p><b>Data Analysis</b> median</p>

## GIPS 3<sup>rd</sup> Grade Mathematics Design Map

Units (in sequence)	Estimated Time Frame (days)	K-12 Program Strands with Corresponding Course/Grade Level (or Unit) Standards	K-12 Program Enduring Understandings	K-12 Program Essential Questions (for process only)	Assessments (note if optional)	C/GL Key Vocabulary Concepts
Unit 12 <b>Dissections</b>	8 days Feb. 6-20	<p><b><u>Geometry. Spatial Concepts, and Measurement:</u></b>  <b>4.1 Geometric Figures</b>                      Identify the number of sides, vertices, and right angles in shapes</p> <p>Identify and create congruent shapes</p> <p>Identify and show the results of slides and flips in two-dimensional objects</p> <p><b>4.1 Geometric Figures</b>                      Estimate and measure area of regular and irregular shapes using square centimeters</p> <p><b>4.5 Measurement Applications</b>                      Investigate, predict, and draw results of putting together two-dimensional shapes</p> <p>Measure perimeter of regular and irregular two-dimensional shapes in centimeters</p>	<p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p> <p>Geometric figures can change size and/or position while maintaining proportional attributes.</p> <p>What we measure influences how we measure.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p>	<p>Three Tans URG pgs.. 56 &amp; 57 (strands 3, 4, 5)</p> <p>DPP - G (strand 2)</p> <p>DPP - M (strand 2 fluency)</p>	<p><b><u>Number &amp; Operations</u></b>                      digit                      thousands                      multiplication                      product                      fraction</p> <p><b><u>Geometry, Spatial Concepts, &amp; Measurement</u></b>                      congruent                      symmetry                      area</p> <p>perimeter                      vertex                      right angle                      volume by displacement</p> <p><b><u>Data Analysis</u></b>                      median</p>
Unit 18 <b>Viewing and Drawing 3-D</b>	5 days Feb. 23-27	<p><b><u>Geometry, Spatial Concepts, and Measurement:</u></b>  <b>4.1 Geometric Figures</b>                      Identify the number of sides, vertices, and right angles in shapes,</p> <p>Make and write a cube model plan (that includes top, front, and right side views)</p>	<p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p> <p>The properties of geometric figures determine the construction of man-made objects and explain the structure of objects found in nature.</p>	<p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p>	<p>Three Ways to Show 3-D URG pgs. 51 &amp; 52 (strand 4)</p>	<p>perimeter                      vertex                      right angle                      volume by displacement</p> <p><b><u>Data Analysis</u></b>                      median</p>
Unit 13 <b>Parts and Wholes</b>	7 days Mar. 2-18	<p><b><u>Number and Operations:</u></b>  <b>2.1 Number Sense</b>                      Recognize that fractional parts of a whole must have equal areas.</p>	<p>Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>The problem in front of you is a member of a family of problems.</p> <p>Numerical representations can be used to describe quantitative relationships.</p>	<p>Where do I recognize and apply mathematics in my life?</p>	<p>Pattern Block Fractions URG p. 29 (also strands 2 &amp; 4)</p> <p>DPP - K (strand 2)</p>	<p><b><u>Data Analysis</u></b>                      median</p>

## GIPS 3<sup>rd</sup> Grade Mathematics Design Map

Units (in sequence)	Estimated Time Frame (days)	K-12 Program Strands with Corresponding Course/Grade Level (or Unit) Standards	K-12 Program Enduring Understandings	K-12 Program Essential Questions (for process only)	Assessments (note if optional)	C/GL Key Vocabulary Concepts
<p>Unit 14 <b>Collecting and Using Data</b></p>	<p>8 days Mar. 19-30</p>	<p><b>Number and Operations:</b> <b>2.2 Numerical Relationships</b> Add and subtract two and three digit numbers</p> <p><b>Algebraic Concepts:</b> <b>3.1 Patterns</b> Use patterns in data tables, pictures, and graphs to make predictions and solve problems <b>3.2 Algebraic Relationships</b> Identify and solve for variables in addition and subtraction</p> <p><b>Geometry, Spatial Concepts, and Measurement:</b> <b>4.4 Measurement Process and Use</b> Tell time to the nearest minute using an analog and digital clock <b>4.5 Measurement Application</b> Solve problems using elapsed time</p> <p><b>Data Analysis, Probability, &amp; Stats:</b> <b>5.1 Data Organization</b> Collect, organize, graph, and analyze data fro given samples <b>5.2 Data Analysis</b> Use data in tables and graphs to make predictions and solve problems</p>	<p>The problem in front of you is a member of a family of problems.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Standard units of measure allow us to describe objects, interpret events and make comparisons in a way that can be universally understood.</p> <p>The design of the questions has a significant impact on the collection of data and the validity of the results.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p>	<p><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>More Time URG p. 24 (strands 2 &amp; 4)</p> <p>Addition &amp; Subtraction URG pgs. 61 &amp; 62 (strand 2)</p> <p>DPP - G (fluency strand 2)</p>	<p><b>Number &amp; Operations</b></p> <p>digit</p> <p>thousands</p> <p>multiplication</p> <p>product</p> <p>fraction</p> <p><b>Geometry, Spatial Concepts, &amp; Measurement</b></p> <p>congruent</p> <p>symmetry</p> <p>area</p> <p>perimeter</p> <p>vertex</p> <p>right angle</p> <p>volume by displacement</p> <p><b>Data Analysis</b></p> <p>median</p>







### GIPS 3<sup>rd</sup> Grade Mathematics Design Map

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Unit 16 Volume	5 days Apr. 20-24	<p><b>Number and Operations:</b>  <b>2.2 Numerical Relationships</b>                      Add and subtract two and three digit numbers</p> <p>Develop fluency with multiplication facts</p> <p><b>Algebraic Concepts:</b>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><b>Data Analysis, Probability, &amp; Stats:</b>  <b>5.1 Data Organization</b>                      Collect, organize, graph, and analyze data from given samples</p> <p><b>5.2 Data Analysis</b>                      Use data in tables and graphs to make predictions and solve problems</p>	<p>Numerical representations can be used to describe quantitative relationships.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Standard units of measure allow us to describe objects, interpret events and make comparisons in a way that can be universally understood.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p>	<p><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before? How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>DPP - D (strand 2)</p> <p>DPP - K (strand 2 fluency)</p> <p>DPP - L (strand 2)</p>	<p><b>Number &amp; Operations</b></p> <p>digit</p> <p>thousands</p> <p>multiplication</p> <p>product</p> <p>fraction</p> <p><u>Geometry, Spatial Concepts, &amp; Measurement</u></p> <p>congruent</p> <p>symmetry</p> <p>area</p> <p>perimeter</p> <p>vertex</p> <p>right angle</p> <p>volume by displacement</p> <p><b>Data Analysis</b></p> <p>median</p>

## GIPS 3<sup>rd</sup> Grade Mathematics Design Map

<p style="text-align: center;"><b>Unit 17 Wholes and Parts</b></p>	<p style="text-align: center;">5 days April 27- May 1</p>	<p><u><b>Number and Operations:</b></u>  <b>2.1 Number Sense</b>            Recognize that fractional parts of a whole must have equal areas</p> <p><u><b>Algebraic Concepts:</b></u>  <b>3.1 Pattern</b>            Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><u><b>Geometry, Spatial Concepts, and Measurement:</b></u>  <b>4.1 Geometric Figures</b>            Identify and create congruent shapes</p> <p><b>4.5 Measurement Applications</b>            Estimate and measure areas of regular and irregular shapes using square centimeters</p> <p><u><b>Data Analysis, Probability, &amp; Stats:</b></u>  <b>5.1 Data Organization</b>            Collect, organize, graph, and analyze data from given samples</p> <p><b>5.2 Data Analysis</b>            Use data in tables and graphs to make predictions and solve problems</p>	<p>Abstraction is what makes mathematics work conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>Numerical representations can be used to describe quantitative relationships.</p> <p>Algebraic representations generalize patterns and relationships that help solve specific problems.</p> <p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p> <p>Geometric figures can change size and/or position while maintaining proportional attributes.</p> <p>Choices in data collection (sampling being used and strategy for how to collect it) affect their validity, interpretation and use.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p>	<p>Halves of a Rectangle URG 23 &amp; 24 (strands 2,3 &amp; 4)</p> <p>DPP - K (fluency strand 2)</p>	<p><u><b>Number &amp; Operations</b></u> digit thousands multiplication product fraction</p> <p><u><b>Geometry, Spatial Concepts, &amp; Measurement</b></u> congruent symmetry area perimeter vertex right angle</p>
<p style="text-align: center;"><b>Unit 19 Multiplication and Division Problems</b></p>	<p style="text-align: center;">9 days May 4-14</p>	<p><u><b>Number and Operations:</b></u>  <b>2.2 Numerical Relationships</b>            Represent multiplication using stories, number lines, data tables, pictures, and arrays</p> <p>Develop fluency with multiplication factors</p> <p>Identify and write number sentences for fact families for multiplication and division</p>	<p>Abstraction is what makes mathematics work: conceptual understanding significantly impacts the efficiency and effectiveness of problem solving.</p> <p>The problem is in front of you is a member of a family of problems.</p> <p>Numerical representations can be used to describe quantitative relationships.</p> <p>The ability to express the relationship amongst sets of numbers provides the foundations for the rules that govern arithmetic and algebra.</p>	<p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p>DPP - Q (fluency strand 2)</p> <p>URG 51 (strand 2)</p> <p>DPP - B (strand 4)</p>	<p>volume by displacement</p> <p><u><b>Data Analysis</b></u> median</p>

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<p style="text-align: center;">OPTIONAL UNIT</p> <p style="text-align: center;">Unit 20</p> <p style="text-align: center;"><b>Connections An Assessment Unit</b></p>		<p><u>Algebraic Concepts:</u>  <b>3.1 Patterns</b>                      Use patterns in data tables, pictures, and graphs to make predictions and solve problems</p> <p><b>3.2 Algebraic Relationships</b>                      Identify and solve for variables in addition and subtraction (two digit numbers)</p> <p><u>Geometry, Spatial Concepts, and Measurement:</u>  <b>4.1 Geometric Figures</b>                      Make and write a cube model plan (that includes top, front, and right side views)</p> <p><b>4.5 Measurement Applications</b>                      Estimate and measure area of regular and irregular shapes using square centimeters</p> <p><u>Data Analysis, Probability, &amp; Stats:</u>  <b>5.1 Data Organization</b>                      Collect, organize, graph, and analyze data from given samples</p> <p><b>5.2 Data Analysis</b>                      Use data in tables and graphs to make predictions and solve problems</p>	<p>Algebraic representations generalize patterns and relationships that help solve specific problems</p> <p>Mathematicians communicate through words, numbers, graphs and symbols, moving fluently from one representation to another as the situation requires.</p> <p>Relationships exist among the angles, sides, lengths, perimeters, areas and volumes of geometric figures.</p> <p>The properties of geometric figures determine the construction of man-made objects and explain the structure of objects found in nature.</p> <p>Data illustrate relationships so inferences and predictions can be made and actions can be taken.</p>	<p style="text-align: center;"><b>Communicating Mathematical Thinking</b></p> <p>What do I visualize when I look at this problem?</p> <p>What strategy did I decide to use to solve the problem? What strategies did other students use? What strategy is most efficient?</p> <p>What do I do when I get stuck?</p> <p>Does my solution make sense?</p> <p>How do I best show my thinking?</p> <p>What information do I have? What information do I need? How do I get that information?</p> <p>Have I seen this before How does that connection help?</p> <p>What common mistakes do people make when working with this type of problem? What is the misunderstanding that causes the mistake?</p> <p>What is the pattern? Does the pattern always work?</p> <p>Where do I recognize and apply mathematics in my life?</p>	<p style="text-align: center;">OPTIONAL End of Year Test (strands 2,3,4 &amp; 5)</p>	<p style="text-align: center;"><u>Number &amp; Operations</u> digit thousands multiplication product fraction</p> <p style="text-align: center;"><u>Geometry, Spatial Concepts, &amp; Measurement</u> congruent symmetry area perimeter vertex right angle volume of displacement</p> <p style="text-align: center;"><u>Data Analysis</u> median</p>

# Year at a Glance

## Grade 6: Geography

Region	Pacing	Unit	Standards	Big Ideas	Essential Questions	Materials
				<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Place</li> <li>Region</li> <li>Interaction</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does where I live affect how I live? How does how I live affect where I live?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> <li><i>How do I interact with other people and the environment? How do other people and the environment interact with me?</i></li> <li><i>How do I plan for the future based on my knowledge and understanding of the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>Teachers' Curriculum Institute, <i>Geography Alive! Regions and People</i></li> <li>The Nystrom <i>World Atlas</i></li> <li>Teacher's Curriculum Institute, <i>Bring Learning Alive!</i></li> </ul>
The Geographer's World	1 week	Creating a Cooperative, Tolerant Classroom				<ul style="list-style-type: none"> <li>* <i>Bring Learning Alive!</i> "Creating a Cooperative, Tolerant Classroom"</li> <li>Multiple Intelligence Surveys 1-2</li> <li>Desk Olympics</li> <li>Lost on the Moon</li> </ul>
	3 weeks	The Tools of Geography	1.1, 1.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> </ul>	<ul style="list-style-type: none"> <li><i>How do geographers show information on maps?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 1, "The Tools of Geography"</li> <li>* The Nystrom <i>World Atlas</i>, "Getting to Know Your Atlas," Lessons 1-2, and "Reviewing Basic Skills," Lessons 1-3</li> </ul> <p>Note: Do <i>Geography Alive!</i> Chapter 1 Preview, then The Nystrom <i>World Atlas</i> lessons, then remainder of <i>Geography Alive!</i> Chapter 1.</p>

Region	Pacing	Unit	Standards	Big Ideas	Essential Questions	Materials
	1.5 weeks	Seeing the World Like a Geographer	1.1, 1.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> </ul>	<ul style="list-style-type: none"> <li><i>Why do geographers use a variety of maps to represent the world?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 2, "Seeing the World Like a Geographer"</li> <li>* The Nystrom <i>World Atlas</i>, "The World," Lessons 1-2 (Lessons 3-5 optional)</li> </ul> <p>Note: Do <i>Geography Alive!</i> Chapter 2 Preview, then The Nystrom <i>World Atlas</i> lessons, then remainder of <i>Geography Alive!</i> Chapter 2.</p>
Canada and the United States	1 week	Mapping Lab: Canada and the United States	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> "Canada and the United States Mapping Lab," Challenges 1-5</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>The Nystrom <i>World Atlas</i>, "Canada" lesson and "United States," Lessons 1-3</li> </ul>
	2 weeks	Settlement Patterns and Ways of Life in Canada	2.2, 4.2	<ul style="list-style-type: none"> <li>Place</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How does where you live influence how you live?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 3, "Settlement Patterns and Ways of Life in Canada"</li> </ul>
	3 weeks	The Great Lakes: The U.S. and Canada's Freshwater Treasures	5.1, 6.2	<ul style="list-style-type: none"> <li>Interaction</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How can people best use and protect Earth's freshwater ecosystems?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 4, "The Great Lakes: The U.S. and Canada's Freshwater Treasures"</li> </ul>
	1.5 weeks	National Parks: Saving the Natural Heritage of the U.S. and Canada	1.1, 6.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>What features make national parks special and worth preserving?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 6, "National Parks: Saving the Natural Heritage of the U.S. and Canada"</li> </ul>
	2 weeks	Migration to the United States: The Impact on People and Places	4.1, 4.2	<ul style="list-style-type: none"> <li>Place</li> <li>Interaction</li> </ul>	<ul style="list-style-type: none"> <li><i>How does migration affect the lives of people and the character of places?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 8, "Migration to the United States: The Impact on People and Places"</li> </ul>
Latin America	3 days	Mapping Lab: Latin America	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> "Latin America Mapping Lab," Challenges 1-5</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>The Nystrom <i>World Atlas</i>, "Middle America" lesson and "South America," Lessons 1-3</li> </ul>
	3 weeks	Land Use Conflict in the Amazon Rainforest	4.5, 6.2	<ul style="list-style-type: none"> <li>Interaction</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How should the resources of the rainforest be used and preserved?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 12, "Land Use Conflict in the Amazon Rainforest"</li> </ul>

Region	Pacing	Unit	Standards	Big Ideas	Essential Questions	Materials
Europe and Russia	2 days	Mapping: Europe and Russia	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* The Nystrom <i>World Atlas</i>, "Russia" lesson and "Europe," Lessons 1-3 Note: Grade 9 does <i>Geography Alive!</i> Europe and Russia Mapping Lab.</li> </ul>
	2 weeks	Population Dilemmas in Europe	4.1, 6.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How do population trends affect a country's future?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 15, "Population Dilemmas in Europe"</li> </ul>
Africa	2 days	Mapping: Africa	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* The Nystrom <i>World Atlas</i>, "Africa" Lessons 1-3 Note: Grade 9 does <i>Geography Alive!</i> Africa Mapping Lab.</li> </ul>
	2 weeks	The Nile River: A Journey from Source to Mouth	1.3, 5.1	<ul style="list-style-type: none"> <li>Place</li> <li>Interaction</li> </ul>	<ul style="list-style-type: none"> <li><i>How do rivers change as they flow across Earth's surface?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 19, "The Nile River: A Journey from Source to Mouth"</li> </ul>
Southwest and Central Asia	1 day	Mapping: Southwest and Central Asia	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* The Nystrom <i>World Atlas</i>, "Middle East" lesson Note: Grade 9 does <i>Geography Alive!</i> Southwest and Central Asia Mapping Lab.</li> </ul>
	1 week	Istanbul: A Primate City Throughout History	4.3, 4.4	<ul style="list-style-type: none"> <li>Place</li> </ul>	<ul style="list-style-type: none"> <li><i>Where are primate cities located, and why are they important?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 25, "Istanbul: A Primate City Throughout History"</li> </ul>
Monsoon Asia	3 days	Mapping Lab: Monsoon Asia	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use and maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> "Monsoon Asia Mapping Lab," Challenges 1-5 OR</li> <li>The Nystrom <i>World Atlas</i>, "Asia," Lessons 1-4</li> </ul>
	2.5 weeks	Mount Everest: Climbing the World's Tallest Physical Feature	2.1, 6.2	<ul style="list-style-type: none"> <li>Place</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How can people both experience and protect the world's special places?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 29, "Mount Everest: Climbing the World's Tallest Physical Feature"</li> </ul>

Region	Pacing	Unit	Standards	Big Ideas	Essential Questions	Materials
	1 week	Population Density in Japan: Life in a Crowded Country	4.4, 5.2	<ul style="list-style-type: none"> <li>Place</li> <li>Interaction</li> </ul>	<ul style="list-style-type: none"> <li><i>How does population density affect the way people live?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 31, "Population Density in Japan: Life in a Crowded Country"</li> </ul>
	2 weeks	The Global Sneaker: From Asia to Everywhere	4.3, 4.5	<ul style="list-style-type: none"> <li>Interaction</li> </ul>	<ul style="list-style-type: none"> <li><i>What is globalization, and how does it affect people and places?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 32, "The Global Sneaker: From Asia to Everywhere"</li> </ul>
Oceania and Antarctica	3 days	Mapping Lab: Oceania and Antarctica	1.3, 2.2	<ul style="list-style-type: none"> <li>Geographic Tools</li> <li>Region</li> </ul>	<ul style="list-style-type: none"> <li><i>How do I use maps and other geographic tools to learn about the world around me?</i></li> <li><i>How does defining the world by regions help me understand the world around me?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> "Oceania and Antarctica Mapping Lab," Challenges 1-5</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>The Nystrom <i>World Atlas</i>, "Antarctica and the Arctic" lesson and "Australia and its Neighbors," Lessons 1-2</li> </ul>
	2 weeks	The Pacific Islands: Adapting to Life Surrounded by Ocean	3.1, 5.2	<ul style="list-style-type: none"> <li>Place</li> </ul>	<ul style="list-style-type: none"> <li><i>How do people adapt to life in an island region?</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Geography Alive!</i> Chapter 34, "The Pacific Islands: Adapting to Life Surrounded by Ocean"</li> </ul>
	2 weeks	Antarctica: Researching Global Warming at the Coldest Place on Earth	3.1, 5.1, 6.2	<ul style="list-style-type: none"> <li>Interaction</li> <li>Planning for the Future</li> </ul>	<ul style="list-style-type: none"> <li><i>How might global warming affect the environment in the world's coldest places?</i></li> </ul>	<ul style="list-style-type: none"> <li>* <i>Geography Alive!</i> Chapter 35, "Antarctica: Researching Global Warming at the Coldest Place on Earth"</li> </ul>

\* Indicates priority lesson. If you fall behind, go to next priority lesson.

Note: Lesson 13, "Life in the Central Andes," and Lesson 20, "Life in the Sahara and the Sahel," can be used instead of or in addition to other non-priority lessons.