***From Godinez Fundamental High School http://www.sausd.us/Page/21244***

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| **MATHEMATICS** | **SCIENCE** |
| * What kind of problem is it? * What do the best problem solvers do? * What does it mean to reason mathematically? * When is the “correct” mathematical answer not the best solution? * What is a number? * Are numbers real? * What can be quantified? * What can be done because we have numbers? * What could not be done if we did not have numbers? * Why do we have negative numbers? Irrational numbers? Imaginary numbers? * What is a pattern? * How can patterns be found? * What can patterns reveal? * What is the pattern? How do you know? * How are mathematical relationships communicated? (a part to whole, a pattern, a sequence) * What are the limits of mathematical modeling? * In what ways does a model illuminate and in what ways does it distort? * How can numbers (data) lie or mislead? * How does what is measured influence how it is measured? * How does how we measure influence what we conclude? * When is estimation better than counting and when is it not? * When is simplification helpful? harmful? * How much or how many (of a sample) is enough? * What is the likely margin of error? * When is it accurate? * What is proof? When is there enough proof? * How is math a language? * What makes a mathematical argument convincing? * How much space does it cover? * What are the exterior limits? | * How does one come to know the natural world and one’s place in it? * How can things around us be classified? * What is the basis of life? * How can one prove cells make up living things? * How are characteristics of living things passed on through generations? * How are form and function related? * How do the structure and behavior patterns of organisms enable them to survive? * How do organisms survive in harsh or changing environments? * How do species change through time? * How do living things obtain and use energy? * Where does energy go? * What is a system? * How does an ecosystem respond to change? * How do I know this is a healthy place? * Why is it important for humans to possess knowledge about how the body and mind function? * How are force and motion connected? * How is energy conserved? * How is matter conserved? * How do matter and energy relate? * How and why do machines make work easier? * How can science and technology deliver a higher standard of living while consuming fewer natural resources? * How is each life form interdependent? * How does the evidence of evolution interact with faith beliefs? * If change in knowledge is inevitable, how can scientific knowledge be durable? * How can science explain and predict things and events in the universe? * How can the world be understandable * What is going on? * How can numbers be used in the study of science? |

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| **NATURE OF SCIENCE** | **SCIENCE and CHEMISTRY** |
| * How does science differ from other disciplines? * How is scientific knowledge generated and validated? * How are scientific questions answered? * How does one decide what scientific claims to believe? What is the evidence? * How are science and common sense related? * How does opinion affect inquiry? * What is the role of serendipity in scientific advances? * How does one study the unobservable? * How does one measure the unquantifiable? * What drives scientific and technological advancement? * How might advances in science and technology affect society? | * How can materials with the same chemical composition be so different (e.g. graphite, diamonds)? * How are materials recycled or disposed of? * How do the unique chemical and physical properties of water make life on earth possible? * What is the role of carbon in the molecular diversity of life? * How do structures of biologically important molecules (e.g. carbohydrates, lipids, proteins, nucleic acids) account for their functions? |
| **SPEAKING, LISTENING** | **WRITING** |
| * Why speak? * What do good speakers sound like? * What makes a speaker easy to follow? * How is spoken language different from written language? * What is body language? * Why listen? * Who will listen? * What does a good listener do? * What does it mean to hear but not listen? | * Why write? * What if writing did not exist? * Why share personal experiences in writing? * To what extent is the pen mightier than the sword? * How is written language different from spoken language? * What makes writing worth reading? * Where do ideas for writing come from? * What makes writing flow while reading? * How do effective writers hold the reader captive? |

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| **LITERATURE** | **LANGUAGES OTHER THAN ENGLISH** |
| * What makes a great book or story great? * What is the difference between popularity and greatness in literature? * Why read? Why read fiction? * Can a fictional story be “true”? why, why not? * Can historical fiction be “true”? why, why not? * What makes a story a story? * What can be learned from print? * Does literature reflect culture or shape it? * What do good readers do? * How do texts differ? * Whose viewpoint is it? * Where does the author’s viewpoint begin and imposing one’s views and experience begin? * Why does it matter? * What’s new here, what’s old? * How does conflict impact relationships? * How does perspective affect meaning? | * Why learn another language? * What is culture? * Why study another culture? * How does language shape culture? * How does culture shape language? * How are native speakers differ from fluent foreigners? * Why isn’t a dictionary enough? * What can be done when one’s ideas are more complex than one’s ability to communicate them? * How can one express complex ideas using simple terms? * How does what is known about a culture impact how people think about the culture? * How does what is known about a culture impact how people respond to the people of that culture? * How does the ability to communicate in a culture’s language impact how people respond to each other? * What happens when people from different cultures meet? * How does the study of a language other than English promote tolerance? * What can be learned about a culture through: its art forms, personal accounts, its music, travel, foreign language study. * What are the benefits and challenges of a culturally diverse society? * How does one’s beliefs about others impact the community? |

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| **THE ARTS** | **SOCIAL STUDIES** |
| * What is art/music? * Where is art/music? * Why create art/music? * How is art/music communication? * How does art/music reflect as well as shape culture? * What can artworks/musical compositions tell about a society? * What does the design of art/music say about its creator? * How do artists/musicians from different eras explore and express similar themes? * What influences artistic/musical expression? * How and where do artists/musicians get their ideas? * How can we “read” a work/compositions of art/music? * Who determines the meaning of art/music? * How can we know if art/music has a message? * Is one picture worth 1,000 words? * How is feeling or mood conveyed musically? Visually? Through movement? * In what ways have technological changes influenced artistic/musical expression? * Is the medium the message? * How is the message enhanced by the medium used? * Should aesthetics supersede function? Why, why not? * What if we did not have art/music in our world? | * Why study history? * How can we learn from the past? * How are the people of the present connected to the people in the past? * To what extent is history different from the past? * How do we know what happened in the past “really” happened? * What can be legitimately inferred from artifacts? * What can be believed? What if primary sources disagree? * Whose “story” is it? * Whose perspective tells history – the Winners or Losers? * Who is a winner and who is a loser in any historical event? * What causes change? * What remains the same? * How do patterns manifest themselves in history? * How has the world changed? * Is history doomed to repeat itself? Why, why not? * Why is “where” important? * What makes places unique and different? * What defines a place? * How do geography, climate, and natural resources affect the way people live and work? * How does where people live affect how they live? * Why do people move? * What story do maps and globes tell? * How do maps and globes reflect history? * What is the “third” world? Is there a “fourth”? * Is slavery history? * What types of issues cause great empires/nations/governments to fall? * What is the impact of a powerful group? * What are some of the positive and negative effects of power? * What causes power to shift? |

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| **GOVERNMENT** | **POLITICS** |
| * Who should govern or rule? * Should the majority always rule? * Why have rules/laws? * When, if ever, can rules/laws be broken? * What are the limits of government control of individuals? * How do governments balance the rights of individuals with the common good? * What are “inalienable rights”? * How do structures and functions of government interrelate? | * How do political systems differ in toleration/encouragement of change? * How do personal responsibilities and civic responsibilities differ? * Can an individual really make a difference? * What are the roles and responsibilities of citizens? Elected officials? * What is a good citizen? * How do citizens (both individually and collectively) influence government policy? * What is power? What forms does power take? * How is power gained, used, and justified? * How can abuse of power be avoided? What constitutes a great leader? * Are great leaders made or born? * In what ways are language and power inseparable? |
| **TECHNOLOGY** | **CULTURE** |
| * How does technological change influence people’s lives? Society? * What social, political, and economic opportunities and problems arise from technological development? * How can technology enhance understanding? * In what ways does technology enhance expression/communication, and hinder it? * What is the cost of progress? * Who controls technology? * What is the best source of information? * What is worth remembering vs. what can be “googled”? * What makes information “true”? * What social, political, and economic opportunities and problems arise from technological development? * How can technology enhance understanding? * In what ways does technology enhance expression/communication, and hinder it? * How has communication assisted in the development of technology and visa versa? | * What does it mean to be “civilized”? * Why study another culture? * Who are the “heroes” in a culture and what do they reveal about the culture? * How do cultures celebrate? * What role do symbols and icons play in a culture? * Who and what do cultures memorialize? * What happens when cultures collide? * What is religion? * How are all religions alike? * How does religion affect culture and visa versa? * How and why do beliefs change? * Is conflict inevitable? Why, why not? * What is worth fighting for? * Can there be a “just war”? why, why not? |

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| **ECONOMICS** | **HEALTH/PHYSICAL EDUCATION** |
| * Why do we have money? * How does something acquire value? * How does the free market system affect the life of a person, community, society, the world? * What is the role of government in business? * Who should pay? Who should benefit? * What does it mean to “make a living”? * How do economics and politics interrelate? | * What is healthful living? * What is wellness? * Who is a winner? * How does physical fitness relate to health? * What constitutes a lifelong sport? * When is physical activity good and not so good for the body? * What makes a top performer/winning team? * Progress and pain – are they both necessary in athletics? * How do you achieve greater power without losing control? * What improves performance? * How do you achieve greater power without losing control? * How does torque affect power? * When should we swing softly? * What social skills are needed to work cooperatively? |