***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?
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| **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?
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| **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?
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