**Sample Essential Questions for Math**

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

* 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?