This essay aims to stimulate the reflection regarding the difficulties related to basic concepts in Geosciences. We have asked instructors and graduate students from Geology, Geography and Agronomy (University of Brasilia) to describe the concepts of minerals and rocks, as well as their applications. We were able to notice that, although these concepts have been taught, in some extent, since first grade, they are not part of their daily lives. Consequently, such concepts become unrealistic and meaningless over the years. We also noticed that geologists showed an expected broader concepts of minerals and rocks. They tried to include aspects such as underground water, ecosystem and soil conservation, source of fertilizers, and soil formation, among others, in the concepts. Geographers limited to describe minerals and rocks. Considerations concerning the linkage between Geology and Geography were restricted to the role of rocks in Geomorphology. Geography students also highlighted the difficulties to find out the role of minerals and rocks in the erosion processes and environmental monitoring. In general, agronomists were not able to differentiate among chemical element, mineral and rock, although one of them described the importance of geological materials in the microbial processes. In short, professionals related somewhat with Geology showed ignorance when asked to define basic concepts such as minerals and rocks. Thus, we question in what extent geologists have worried about interdisciplinarity, in order to build a solid geology-related educational background for professionals involved with Natural Resources and Environmental Science.