Minerals as the most fundamental level of observation in the Earth Sciences

Earth scientists make observations at many different spatial scales, and with many different foci of interest. However, regardless of the focus of interest, the smallest and most funda-

mental scale of observation in the Earth Sciences is almost always that of minerals. That is true whether we're thinking of minerals in the igneous and metamorphic rocks that dominate the crust and mantle, minerals in sediments and sedimentary rocks near the Earth surface, or the minerals of which almost all fossils consist.

