14. Sand vs Stars Problem

When I first started teaching Astronomy, I had remember that an Astronomy Professor once mentioned that there were more stars in the sky than grains of sand on all the beaches on Earth. Now that I was teaching Astronomy I figured I'd tackle this problem. Having traveled much of the world, I realized that beaches on the Big Island of Hawaii had a lot of sand but Key West had no beaches, thus calculating the grains on all the beaches would be tough. But what if I upped the ante and simply calculated the number of grains of sand to fill a sphere the size of the entire planet Earth? Now would there be more sand than stars? Bringing in sand from my children's sandbox, how did I have the students calculate the number of grains of sand to fill planet Earth AND figure out how many stars in the Universe minimum?