## Common App (Word Count: 648)

Richard Dawkins regards science as "the poetry of reality." As a freshman, I quickly dismissed that notion. *Call of Duty*, Nike's latest soccer cleats, "Scherzo" by Van Goens for cello – these were my chief concerns. I was also unimpressed by my freshman biology teacher's delivery of a passage from a dreary science novel on the first day of school (in other words, I had no idea what he was saying). I never anticipated how much my views would change.

All people, at some point, struggle with the fundamental question of purpose. To me, the closest one can get to answers is through exploration of science. My first experience of this occurred mid-year of ninth grade Biology. Upon being taught to regard atoms as the building blocks of matter (even though atoms consist of smaller particles), I found myself struggling. Not struggling in the traditional sense of having difficulty studying course material, but rather struggling to comprehend the paradoxical idea that consciousness can result from a mass of inanimate particles, the same types of particles that make up rocks and plastic and bars of soap. What does it really mean to be alive? Are living things simply complex machines that can be manufactured given detailed instructions? Without a basic knowledge of science, one might never ponder these concepts underlying existence. Thus, through science, I can embrace my curiosities and gain insight into the inner workings of reality.

However, science is not just about satisfying curiosity. It is multi-faceted. From the wheel to penicillin, science's capacity to effect change is bound only by man's immeasurable imagination. My personal ardor is in sustainability – the inspiration for which is encapsulated in the "Blue Marble" photograph of the Earth, taken by astronauts from space during the 1972 Apollo 17 mission. Unlike a typical map, countries in the Blue Marble are not color-coded or outlined; the mossy continental soil is fluidly unbounded by artificial territories. What truly

transcends the Blue Marble's value beyond that of a map, however, is not merely the photo's depiction of Earth itself. Rather, it's the depiction of the infinite blackness of space engulfing Earth, reminding us of the innumerable stars, billions of galaxies, crushing black holes, and vibrant supernovae that dwarf our microscopic existence. For me, the Blue Marble emphasizes the notion that Earth is infinitesimal yet monumental, for it proliferates not just life, but sentient beings capable of asking the big questions. The Blue Marble emphasizes the notion that in our solitude, we – African Americans and Caucasians, gay men and straight women, Muslims and Christians, ant colonies and flora – are unified as Earth's inhabitants. It emphasizes the notion that Earth and its luscious colors of tropical green and desert beige, its expansive watery oceans, its variety of birds and fish and quadrupeds, and its intelligent dominant race are worth preserving. In short, the Blue Marble inspires me to work towards a sustainable society.

From carbon capture to fuel cells to photovoltaics, there is exciting technological potential to balance human population growth with responsibility for preserving Earth's resources and inhabitants. Consequently, I am eager to journey into the world of materials science and engineering, where I can learn the secrets of the microscopic realm while simultaneously crafting meaningful solutions for our planet.

Looking back at the last day of freshman Biology, when my teacher decided to reread that "dreary science novel," A Short History of Nearly Everything by Bill Bryson, I was amazed at how much I'd changed. Unlike that first-day freshman, I understood every word and concept like notes on sheet music. I found beauty in the author's marriage of technicalities and big picture ideas. Moments after my teacher finished reading, a barrage of thunderous applause erupted. In that moment, I realized science isn't for detached pedants of mathematical symbols and scientific terms. It's an enriching, useful passion – the recognition, exploration, and

utilization of the "poetry of reality."