**The Purple Earth hypothesis.** A theory set forth by University of Maryland researcher Shiladitya DasSarma in 2007 and named for a speculative but imagination-capturing implication to which it leads. The Purple Earth hypothesis proposes that ancient forms of life relied on retinal, a pigment which absorbs green light, to generate energy from the sun. (The sun happens to output most of its energy in the green part of the visible spectrum).

When chlorophyll-based organisms eventually appeared their survival may have depended on a kind of scavenging ability to take advantage of the wavelengths of light left behind by retinal-based life. This, DasSarma believes, is why plant life as we know it evolved to absorb light in the red and blue parts of the spectrum and reflect the green. And since retinal is plummy purple in color, he also argues that large swathes of the early Earth probably appeared to have been covered in a royal blanket. (Salt-loving archaebacteria with retinal
bound up in their protein membranes are still around; when these tiny microbes colonize salt lakes, they do lend them their shade.)

I want to collect the color of the brightest things—purple cauliflowers, orange beets, a buddha’s hand of perfect yellow fingers—and pour them into you again.