(There are three different styles of rock deformation: brittle, ductile, and elastic. Can you identify various common objects (e.g., foods) that show these styles of deformation? **The chocolate bar shows brittle property i.e. hard but can be broken in pieces. A chewing gum can be ductile i.e. can be stretched. While a rubber band is an example of elastic.**)

(The lithospheric plates move around the surface of the Earth, but the surface area of the Earth has not changed over geological time. If a new spreading center (divergent plate boundary) were to develop, what other plate changes might also occur at the same time? **In case of new spreading centre, the temperature of the surface of the plates needs to be high. This will also lead to deep earthquakes and tremors.)**
(Ancient mythological and religious tales often ascribe catastrophic events to the anger of God or the gods. Do you think any of these catastrophes might actually be natural events? Which ones?. **I believe that almost all of these catastrophes are natural events occurring because of natural causes. For instance, the flash floods are caused by extreme rain on surface with poor absorption**.)

(Waves are discussed in the context of earthquakes and music. Identify other wave phenomena with which you are familiar, and describe the wavelength and frequency ranges characteristic of these phenomena. **Waves occur because of obstructions as well. For instance, in a river the presence of a boulder makes waves around it. The frequency and wavelength of the waves depend on the size of boulder and flow of water**.)

(If you had to evaluate a novel method for short-term earthquake prediction, what criteria would you use? In other words, how well or poorly should the method perform before you judge it a reliable method or a failed method. **Observing the tectonic movements, specially around fault lines can help predict or identify the high-risk areas because of earthquakes. I believe that this method can be accurate to a certain level.**)

(Which would be the better of the following two bad scenarios for Los Angeles: a magnitude 6 earthquake on the Newport-Inglewood fault running through the heart of downtown Los Angeles, or the “Big One,” a magnitude 8 earthquake rupturing all of the southern San Andreas, but occurring more than 50 km from the city center? Why?. **The first scenario will have more casualties and damage of urban infrastructure as the earthquake will hit the high population and developed areas. While the second case might not have much urban damage**.)

(You are an urban planner for the city of Seattle. What information would you need in order to plan for safe future growth of the city? What criteria would you use to decide whether development should be encouraged or restricted in a particular area of the city?. **As an urban planner, my focus will be on the strength of the surface to withstand the development of high rise building and the behaviour of the surrounding water bodies. Overloading the construction can lead to greater damage in future**.)