PLEASE SUBMIT YOUR WORK THROUGH GOOGLE CLASSROOM

- 1. Watch "Powers of Ten" video: https://www.youtube.com/watch?v=bhofN1xX6u0
- 2. The world's tallest living tree, a *coast redwood* named Hyperion, measures about <u>116 m</u> in height. By how many orders of magnitude bigger (or smaller) is it than the following:

A. an average height 10-year-old (about <u>55 inches</u>)?

- B. the tallest mountain in the Solar System, Olympus Mons on Mars (about <u>15.5</u> <u>miles</u>)?
- C. a smartphone (about <u>15 cm</u> long)?
- D. \* the Statue of Liberty (look up the size yourself please)?

Hint: review the steps we did in class (Lecture #5, slides 7-9) and <u>don't forget to convert</u> all measurements to *meters* before looking for the nearest power of ten!

You might also need a table of metric prefixes provided in Lecture #3 and imperialmetric equivalencies given in Lecture #4.