

4. Review Example 1.07 and these tables for [Prefixes](#) and [Derived Units](#).

Given that the world's [oceans, seas, and bays](#) contain a total of $1.338 \times 10^9 \text{ km}^3$ of salt water, determine the volume in both m^3 and cm^3 , as well as the mass in grams.

Show all of the equations. Include all units and all conversion factors.

Show how you derived the two conversion factors for volume.

Report all of the values in proper scientific notation, and count the correct number of significant digits. Use 1.03 g/cm^3 as the density of sea water.

(3 pts)

5. Review Example 1.08 and this table of [Conversion Factors](#). Convert the total mass of salt water from problem 4 into ounces and then into pounds. Show all of the equations. Include all units and all conversion factors. Report both values in proper scientific notation with the correct number of significant digits. (2 pts)