

For all problems, please show the dimensional analysis setup and give the answer to the correct number of significant figures.

- Convert the following quantities into SI units with the correct number of significant figures:
 - 5.4 in to cm
 - 66.31 lb to g
 - 0.552 gal to mL
- Copper has a density of 8.96 g/cm^3 . What is the mass of 75.3 cm^3 of copper?
- The maximum speed of some U.S. interstate highways is 75 mi/h. Convert this speed to m/s.

Chemistry 51

4. Convert each of the following quantities:

a) 253 mi to m

b) 536 mg to kg

c) 85°C to $^{\circ}\text{F}$ and K

d) 320°F to $^{\circ}\text{C}$