**Additional Practice: Metric Conversions**

***INSTRUCTIONS****: Answer each question thoroughly. SHOW ALL OF YOUR WORK!*

1. Convert the following metric measurements to the new units given (show your work!)
   1. 93,000,000 cm 🡪 km
   2. 15.68 mm 🡪 m
   3. 0.04508 kg 🡪 mg
   4. 23.5 MW 🡪 kW
2. In 1947, Chuck Yeager became the first person to break the sound barrier in an airplane. He flew his airplane at a speed of 670 mi/h. What is this speed in m/s?
3. The world’s longest goldfish on record is 19 in. from nose to tail. How long is this fish in m?
4. The density of the planet Saturn is less than that of water (meaning that if we found a body of water big enough, Saturn would float!). Saturn’s density is 677 kg/m3. What is Saturn’s density in g/mL?
5. The acceleration of objects that are in free-fall here on Earth is 9.80 m/s2. What is the free-fall acceleration of these objects measured in ft/s2?
6. The world record for the Women’s 100m sprint, held by Florence Griffith-Joyner of the USA, is 10.49 seconds. This means she was running at an average speed of 9.53 m/s. How fast was she running in mi/h?
7. How many 2 L bottles of pop will fit into a bathtub that is 26 in. x 57 in. x 23 in.?