**PPM Worksheet**

**1.** The Safe Drinking Water Act (SDWA) sets a limit for mercury-a toxin to the central nervous system-at 0.002 ppm by mass. Water suppliers must periodically test their water to ensure that mercury levels do not exceed this limit. Suppose water becomes contaminated with mercury at twice the legal limit (0.004 ppm).

How much of this water would have to be consumed for someone to ingest 50 mg of mercury? **(6250 L)**

# 2. What is the concentration of iron ions in ppm if 0.00020 g iron (III) ions are dissolved in 2.5000 kg of water? (0.08 ppm Fe3+ )

# 3. Oil was found to have dioxin contamination of 2 ppm.

# How many ml of the oil would contain 0.01 gram of dioxin? (5 000 mL)

4. A solution contains Cu2+ ions at a concentration of 0.0190 g/L.

What is the Cu2+ concentration in ppm? **(19 ppm)**

**5.** In some creek water, the concentration of lead ions is 0.05ppm.

Calculate the mass of the lead ions per litre of creek water? **(0.05mg lead ions)**