

## Metric Units of Mass and Liquid Volume

Mass is the amount of matter in an object. Metric units of mass include grams (g) and kilograms (kg). 1 kilogram represents the same mass as 1,000 grams.

One large loaf of bread has a mass of about 1 kilogram. Jacob has 3 large loaves of bread. About how many grams is the mass of the loaves?

$$3 \text{ kilograms} = 3 \times \underline{1,000} \text{ grams}$$

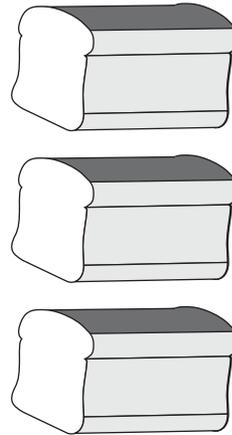
$$= \underline{3,000} \text{ grams}$$

Liters (L) and milliliters (mL) are metric units of liquid volume. 1 liter represents the same liquid volume as 1,000 milliliters.

A large bowl holds about 2 liters of juice. Carmen needs to know the liquid volume in milliliters.

$$2 \text{ liters} = 2 \times \underline{1,000} \text{ milliliters}$$

$$= \underline{2,000} \text{ milliliters}$$



### Complete.

**1** 4 kilograms = \_\_\_\_\_ grams

**2** 9 liters = \_\_\_\_\_ milliliters

**3** 3 liters = \_\_\_\_\_ milliliters

**4** 7 kilograms = \_\_\_\_\_ grams

**5** 5 kilograms = \_\_\_\_\_ grams

**6** 8 liters = \_\_\_\_\_ milliliters