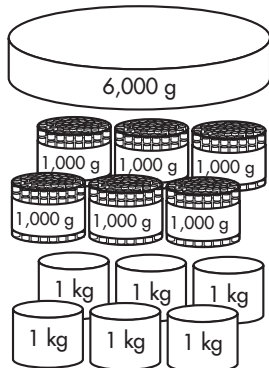


Converting Metric Units of Mass

How to convert a mass measurement from one metric unit to another:

Converting a mass from a smaller to a larger metric unit

6,000 grams = _____ kilograms



Think: If I measure the same mass using a larger unit, I will need a smaller number of units.

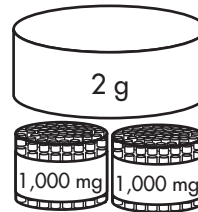
Operation: Divide.

You know $1,000\text{ g} = 1\text{ kg}$.

Find $6,000 \div 1,000$; $6,000\text{ g} = 6\text{ kg}$

Converting a mass from a larger to a smaller metric unit

2 grams = _____ milligrams



Think: If I measure the same mass using a smaller unit, I will need a larger number of units.

Operation: Multiply.

You know $1\text{ g} = 1,000\text{ mg}$.

Find $2 \times 1,000$; $2\text{ g} = 2,000\text{ mg}$

Relationships Between Metric Units of Mass					
Kilogram			Gram		Milligram
1 kg	=		1,000 g		
			1g	=	1,000 mg

Convert each unit of measurement.

- 72 g = _____ mg
- 8,000 g = _____ kg
- 2,000,000 mg = _____ kg
- 2,340 kg = _____ g

Compare. Use $<$, $>$, or $=$.

- 4,000 mg 5 g
- 64 kg 64,000 g
- 3 kg 40,000 mg
- 5,000 g 4 kg