

Name _____

Converting Metric Units of Mass

Convert each unit of measurement.

1. 15,000 g = 15 kg

2. 285 kg = 285,000 g

3. 5,000 mg = 5 g

4. 7,000 g = 7 kg

5. 490,000 g = 490 kg

6. 648 g = 648,000 mg

7. Order the following masses from least to greatest:
500 g, 50 kg, 5,000 mg

5,000 mg; 500 g; 50 kg

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

8. 55,000 mg $<$ 5 kg

9. 20 g $<$ 2 kg

10. 11 g $>$ 1,100 mg

11. 4,000 mg $=$ 4 g

12. What is the value of x ? $40,000 \text{ mg} = 10x \text{ g}$

A 400

B 40

C 4

D 0.4

13. A recipe that serves two people calls for 1,600 milligrams of baking soda. You want to make enough for 10 people. How much baking soda will you need, in grams?

$1,600 \times 5 = 8,000 \text{ mg} = 8 \text{ g}$

14. You want to convert 1 kilogram to milligrams. You already know that 1 kilogram = 1,000 grams. Explain how knowing that 1 gram = 1,000 milligrams can help you.

Sample answer: $1 \text{ kg} = 1,000 \text{ g}$

and $1 \text{ g} = 1,000 \text{ mg}$. So,

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