



Practice



Video



Tools



Games

## Additional Practice 13-5

### Equivalence with Metric Units of Capacity and Mass

### Another Look!

Convert each unit.



To convert from liters to milliliters, multiply by 1,000.

To convert from kilograms to grams, multiply by 1,000.

Convert 8 liters to milliliters.

$$1 \text{ liter} = 1,000 \text{ milliliters}$$

$$8 \times 1,000 = 8,000$$

$$8 \text{ liters} = 8,000 \text{ milliliters}$$

Convert 9 grams to milligrams.

$$1 \text{ gram} = 1,000 \text{ milligrams}$$

$$9 \times 1,000 = 9,000$$

$$9 \text{ grams} = 9,000 \text{ milligrams}$$

In 1–3, tell what metric unit you would use to measure each.

1. Water in a washing machine

2. The mass of a large dog

3. The mass of a grape

For 4–7, convert each unit.

4. 2 liters = \_\_\_\_\_ milliliters

5. 8 grams = \_\_\_\_\_ milligrams

6. 3 kilograms = \_\_\_\_\_ grams

7. 7 liters = \_\_\_\_\_ milliliters

For 8–9, complete each table.

8.

Liters	Milliliters
7	
8	
9	

9.

Kilograms	Grams
4	
5	
6	

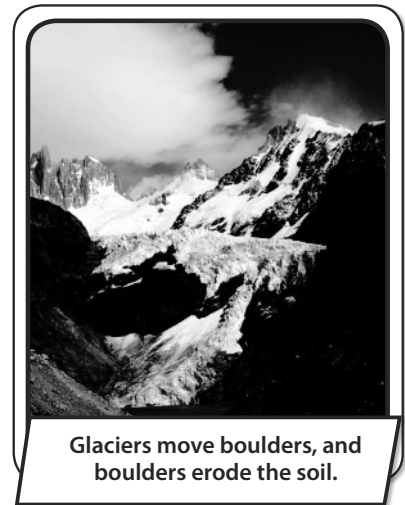


10. **A-Z Vocabulary** Fill in the blank:  
\_\_\_\_\_ is the amount of matter something contains.  
\_\_\_\_\_ is a measure of how heavy an object is.

11. Would a cup hold 250 liters of liquid or 250 milliliters of liquid? Explain.

12. **enVision® STEM** A glacier moved a boulder with a mass of 9 kilograms. What was the mass of the boulder in grams?

13. Another glacier moved a boulder that weighed 2 tons. How many pounds did the boulder weigh?



14. **Reasoning** Hannah has 3 boxes of rice. One box contains 3 kilograms, the second box contains 150 grams, and the third box contains 500 grams. She wants to divide the rice equally into 5 bags. How much rice should she put into each bag? Explain.

15. **Higher Order Thinking** Rob has a 2-liter bottle of iced tea. He poured an equal amount of the iced tea into 8 containers. How many milliliters did Rob pour into each container?

## Assessment Practice

16. Which shows a correct comparison?

 4.MD.1.1

- (A) 1,000 liters  $<$  1,000 milliliters  
(B) 40 liters  $<$  400 milliliters  
(C) 5,100 milliliters  $>$  5 liters  
(D) 900 milliliters  $>$  900 liters

17. Which statement is true?  4.MD.1.1

- (A) 5 grams = 500 milligrams  
(B) 1 gram = 10 milligrams  
(C) 910 kilograms = 910 grams  
(D) 2 kilograms = 2,000 grams