

Name _____

period _____

Science Skills -6

Metric Conversions 1

Like the standard measurement system, the metric system can be used to measure length, weight, and volume. The **meter** is the basic unit of length in the metric system. The **gram** is the basic unit of weight. The **liter** is the basic unit of volume. Prefixes are added to these terms to name measurements that are larger or smaller.

A meter is a little longer than a yard. The meter is divided into ten equal parts called decimeters. Each decimeter is divided into ten equal parts called centimeters. Each centimeter can be further divided into ten equal parts called millimeters.

1. There are _____ decimeters in a meter.
2. There are _____ centimeters in a meter.
3. There are _____ millimeters in a meter.

The metric system also has names for length measurements larger than a meter. Ten meters make up a dekameter. There are ten dekameters in a hectometer. A kilometer is ten hectometers.

4. There are _____ meters in a dekameter.
5. There are _____ meters in a hectometer.
6. There are _____ meters in a kilometer.

The prefixes *kilo*, *hecto*, *deka*, *deci*, *centi*, and *milli* can be added to liters or grams, too.

kilo	hecto	deka	meter, liter, or gram	deci	centi	milli
(k)	(h)	(dk)	(m, l, or g)	(d)	(c)	(m)
1000	100	10	1	.1	.01	.001

7. The abbreviation for dekaliters is dkl. The *dk* from *deka* is added to the *l* from *liter*. List the abbreviation for each of the following:

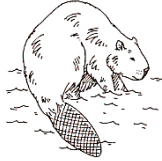
- | | |
|---------------------|---------------------|
| a. centimeters_____ | e. kilometers_____ |
| b. milliliters_____ | f. millimeters_____ |
| c. kilograms_____ | g. dekagrams_____ |
| d. milligrams_____ | h. hectoliters_____ |



DIRECTIONS

Rename the weight. Choose from grams (g) to kilograms (kg).

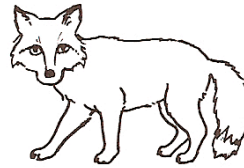
1.



Beaver = 22,000 g

8 Beavers = _____ kg

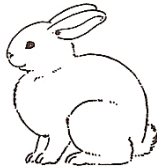
2.



Fox = 10,000 g

10 Foxes = _____ kg

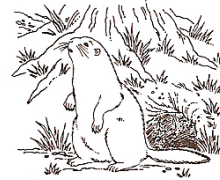
3.



Rabbit = 4,000 g

13 Rabbits = _____ kg

4.



Woodchuck = 9,000 g

7 Woodchucks = _____ kg

5.



Skunk = 7,000 g

11 Skunks = _____ kg

6.



Raccoon = 16,000 g

9 Raccoons = _____ kg

7. List the animals from the heaviest to the lightest.

8. Why is it easier to measure large animals in kilograms than in grams?
