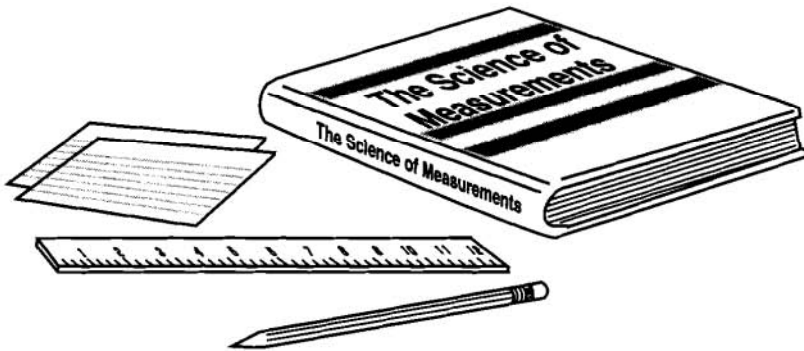


A Simple Ruler

Make your own 6-inch ruler to measure things.

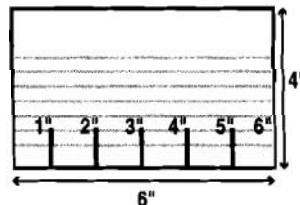
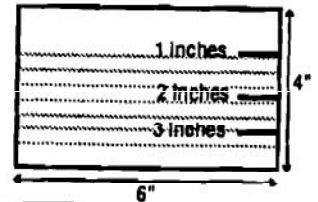
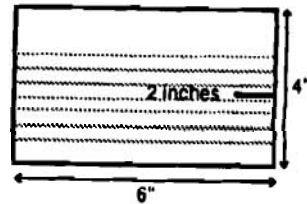


MATERIALS

pencil
two 4-by-6-inch
index cards
books and other
things to measure
ruler

Procedure

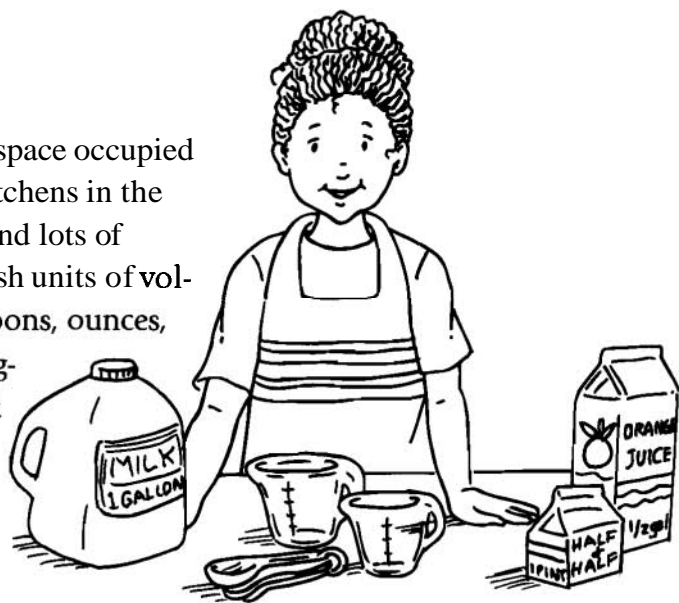
1. Fold an index card in half lengthwise. Make a mark on the edge of the card at the fold line and label the mark "2 inches."
2. Fold the index card in half lengthwise again. You've now divided the card into four sections that are each 1-inch wide. Mark the folds and label them "1 inch" and "3 inches."
3. Use the labeled card to mark a second index card in 1-inch segments on the long edge. Label the inches. This second card is your 6-inch ruler.





MEASURING VOLUME IN ENGLISH AND METRIC UNITS

Volume" is the amount of space occupied by something. In most kitchens in the United States, you are likely to find lots of implements for measuring English units of volume, such as teaspoons, tablespoons, ounces, and cups. If you look in the refrigerator, you might also find a pint of half-and-half, a quart of orange juice, and a gallon of milk. In the English system of measuring volume, 8 ounces make 1 cup, 2 cups make 1 pint, 2 pints make 1 quart, and 4 quarts make 1 gallon. (Because the word *ounce* is also used to indicate weight in the English system, the ounces used to measure volume are often called "fluid ounces.")

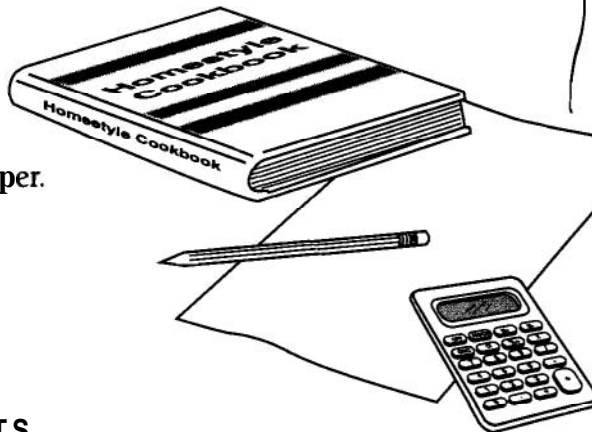


It's a Party

What if you wanted to cook something for a lot of friends, but the recipe only tells you how to make enough for half that many? Here's how to multiply a recipe.

Procedure

1. Copy the following chart on a piece of paper.



MATERIALS

pencil
paper
cookbook
calculator

RECIPE INGREDIENTS

Ingredients	Original Recipe Amounts	Double the Amounts	Quadruple the Amounts

Procedure

1. Copy the following chart on a piece of paper.

ESTIMATED AND ACTUAL WEIGHTS

Items to Weigh	Gussed Weight in Pounds	Actual Weight in Pounds	Gussed Weight in Kilograms	Actual Weight in Kilograms
yourself				
your pet				
younger sibling (age: _____)				
backpack full of books				
kitchen chair				
bowl of fruit				
lamp				
your sneakers				
empty suitcase				
pot of water				
object of your choice				

2. Collect as many of the items listed in the chart as you can.
3. Guess your weight in pounds. Then weigh yourself on the bathroom scale to get your actual weight. Write your gussed weight and your actual weight in columns 2 and 3 of the chart.
4. Pick up one of the items on the list, such as your pet. Guess how much your pet weighs in pounds. Write your pet's gussed weight in column 2.
5. Get on the scale holding your pet. What do you and your pet together weigh? Subtract your weight from the combined weight. The difference is the weight of your pet. Write your pet's actual weight in column 3.
6. Guess how much your pet weighs in kilograms. Write the gussed weight in kilograms in column 4 of the chart.