

What Is a Fraction?

Suppose that you are doing an experiment in your class on the benefits of sunlight to plants. Your teacher has asked you to put $\frac{1}{2}$ of the plants in the sun. What does that mean? While whole numbers, such as 1 and 879, are used to indicate *how many*, **fractions** are used to tell *how much of a whole*.

The number below the fraction bar in a fraction is called the *denominator*. This number indicates how many parts there are in the whole. The number above the fraction bar, called the *numerator*, tells you how many parts of that whole are represented.

PROCEDURE: To make a fraction, write the total number of units in the whole as your denominator. Then write the number of parts of that whole being represented as the numerator.

SAMPLE PROBLEM: Your class has 24 plants. Your teacher instructs you to put 5 in a shady spot. What fraction does this represent?

Step 1: Write the total number of parts in the whole as the denominator.

$$\frac{\quad}{24}$$

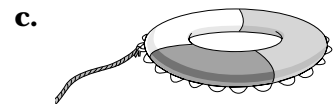
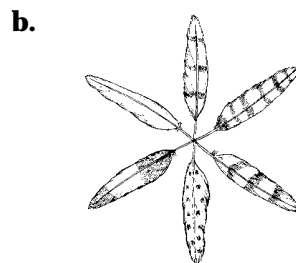
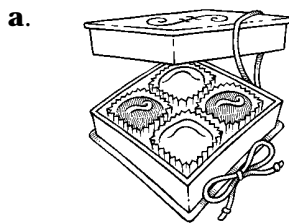
Step 2: Write the number of parts of the whole being represented as the numerator.

$$\frac{5}{24}$$

$\frac{5}{24}$ of the plants will be in the shade.

Constructing Fractions

1. What fraction of the whole does the shaded or patterned part represent?



2. Of the 29 students in your class, 10 have brown hair, 8 have black hair, 6 have blond hair, and the rest have red hair.

a. What fraction of the class has blond hair?

b. What fraction of the class has red hair?
