

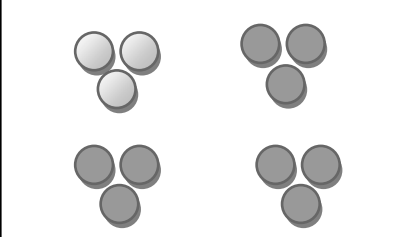
## (2) Identify the fraction of a set

### Activity

Give your student three counters of one color, such as green, and 9 of another color, such as blue. Ask your student how many counters he has. Ask him to group them by 3, putting all the green counters in one group. Then ask him what fraction of the counters are green. He may say three twelfths. Tell him that is correct, when we take the whole to be 12, and each equal part to be 1 out of the 12.

Ask your student how many equal parts there are. There are 4 equal parts. Tell her that since each part is equal, we can use the number of parts as the whole. 1 part has green counters. So 1 part out of 4 parts is green. We can say that one fourth of the counters are green.

Ask your student what fraction of the counters are blue. Guide him to say that three fourths of the counters are blue.



1 group of green counters  
4 groups of counters total

$\frac{1}{4}$  of the objects are green.

$\frac{3}{4}$  of the counters are blue.

### Discussion

Concept page 68

Tasks 8-14, pp. 71-72

Compare the answers for 11 and 12. Both are half, but the value for a half in each is different because the whole is different.

For task 13, ask, "If 2 dolls are one third of the total dolls, how can we find the total number of toys without counting or seeing a picture?" We know there are 3 equal groups, and that one out three has 2 toys. So we can multiply to find the total number:  $2 \times 3 = 6$ .

### Workbook

Exercise 7, p. 108

### Reinforcement

Give your student some counters, of which a fraction is a specific color. Ask him to make equal groups and then tell you the fraction that is that color, using the number of groups of the whole. For example, give him 20 counters of which 5 are yellow and the rest are any other colors and have him tell you what fraction are yellow.

### Enrichment

Give your student 12 counters and ask her to find  $\frac{1}{4}$  of the whole. Since the bottom number is 4, she needs to make 4 equal groups. Then,  $\frac{1}{4}$  of 12 is the number that is in each group, 3. Then ask her to find  $\frac{3}{4}$  of 12. This is the number in 3 of the 4 equal groups. Repeat with other examples, asking her to find the fraction of a whole using counters. Only use examples where the whole can be evenly divided by the number in the denominator.

8.  $\frac{1}{3}$
9.  $\frac{1}{4}$  are pink  
 $\frac{3}{4}$  are blue
10.  $\frac{2}{5}$  are yellow
11.  $\frac{1}{2}$  are apples  
5 apples
12.  $\frac{1}{2}$   
8
13. 2
14. 3