Lesson 3: Basic Concepts for Fractions

Purpose: To determine the total number of parts in a figure and to shade the figure for the given number of parts.

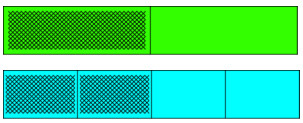
Materials: Fraction Bars, 5-Bars mats, Fraction Bingo mats, markers, and Master #1 "Double-box Recording Sheet"

TEACHER MODELING/STUDENT COMMUNICATION

Activity 1 Comparing Half-shaded Bars

Fraction Bars

Pass out a deck of bars to each group of students. Ask students to find the two bars shown here. Ask what they notice about these bars. (They are half shaded and have the same shaded amount.)



- Find all the other bars that are half shaded and line them up to compare their shaded amounts.
- How many bars are half shaded? (4)
- What is the only type of bar (color) that is not half shaded? (yellow bars)

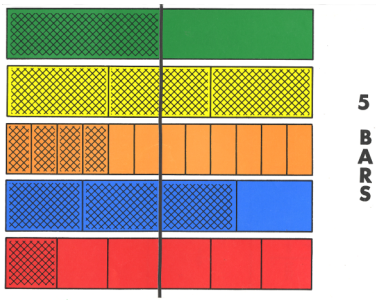
Ask students to place a band around their bars and place them aside.

5-Bars mats

markers

5-Bars (whole class)

Pass out a 5-Bars mat to each student or pair of students and markers. Hold up a mat such as the one shown here and point out a bar that is half shaded. Place a ruler or straight edge on the "half-lines" to show students how they can use the center lines to see what bars are half shaded.



- Look at your mats to see if you have a bar that is half shaded. How many of you have such a bar?

Ask a few students to describe the bar on their mat that is half shaded.

Play 5-Bars with the whole class by selecting bars one at a time and describing the color and number of shaded parts. As whole bars, zero bars or half-shaded bars are selected, remind students that they can place a marker on any of these bars. As you select and describe bars, also occasionally call attention to the total number of parts in a bar by holding up the bar and pointing out each part. For example,

- I have a blue bar with 3 shaded parts. Notice that it also has 1, 2, 3, 4 equal parts in all.

Pointing to each part of a bar as you count the total number of parts, will help students to see that the total number of parts includes both the shaded and unshaded parts.