

Lesson 9: Solving Story Problems

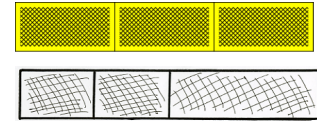
Purpose: To create situations through story problems and relate fractions to everyday events

Materials: Fraction Bars, paper, pencils, and Master #4 "Creating Story Problems"

TEACHER MODELING/STUDENT COMMUNICATION

Activity 1 Illustrating non-equal parts

Tape a yellow whole bar on the board and beneath it sketch a bar with different size parts as shown here.



- Which of these two bars would be best for sharing the parts of a bar among 3 people so that each person received the same amount? (The yellow bar)

Discuss with students that the yellow bar has 3 parts of the same size, that is, it is divided equally into 3 parts. The lower bar does not have 3 parts of the same size.

Fraction
Bars

Activity 2 Purpose: Using bars to illustrate “equal shares”

- Which whole bar in your deck can be used for sharing among 6 people? (The red whole bar.)

Discuss student responses and reasoning. Most students will select the red whole bar. Some student might notice that the orange whole bar can be used for equal sharing among six people, if each person received two parts of the bar.

Repeat this activity by asking:

- What whole bar can be used for sharing among: 4 people? (The blue whole bar.)
Sharing among 3 people? (The yellow whole bar.) 6 people? (The red whole bar.)
12 people? (The orange whole bar.)

If this question is difficult for some students, tape a whole bar on the board and write the name of a student above each shaded part to illustrate fair shares among students.

Fraction
Bars

Activity 3 Using bars to illustrate story problems

1. Each group will need a deck of bars. Ask students to find a blue bar with one part shaded in their decks. Pose the following problems:



Paper and
pencils

- Mat is cooking a batch of popcorn. A stick of butter has been divided into 4 equal parts and he needs one of these parts. What fraction of a stick of butter does he need? ($\frac{1}{4}$)