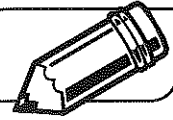


LESSON
6•5

Identify the Whole



In the following number stories, find the whole using parts-and-total diagram. Write the fraction for the given part, and rename the fraction as a percent.

Example: Two girls each have 5 hats. Three of their hats are purple. What percent of the hats are purple?

Solution: $2 * 5 = 10$ hats; 3 out of 10 = $\frac{3}{10}$; Rename $\frac{3}{10}$ as a fraction with 100 as the denominator $\frac{10 * 3}{10 * 10} = \frac{30}{100}$; $\frac{30}{100} = 0.30$, or 30%.

Reminder: To use a calculator to convert a fraction to a percent, divide the numerator by the denominator. Use your fix key to round to the nearest hundredth, or multiply the decimal by 100 to display the percent.

1. Lamont, Jose, and Kenji are recycling soda cans. Lamont collects 13 cans. Jose collects 20 cans, and Kenji collects 17 cans. What percent of the cans does Jose collect?

Unit: _____ Whole: _____

Fraction: _____ Percent: _____

Total		
?		
Part	Part	Part
13	20	17

2. Jacqui and Edna decide to share their hot lunches. They put together their fried potatoes and their onion rings. There are 33 pieces of fried potatoes and 17 onion rings. What percent of the lunches are the onion rings?

Unit: _____ Whole: _____

Fraction: _____ Percent: _____

Total	
?	
Part	Part
33	17

3. The boy's club is having a popcorn sale. Each of the 10 members of the club is given 5 boxes of popcorn, but Edward sells only 3. What percent of the 5 boxes remain for Edward to sell?

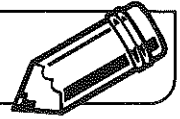
Unit: _____ Whole: _____

Fraction: _____ Percent: _____

Total	
5	
Part	Part
3	?

LESSON
6•5

Investigating Sample Size



1. Choose a specific outcome or event for one of the following actions.

◆ Flipping a coin

Example: The coin will land heads up. _____

◆ Rolling a die

Example: The die will land with a 4 on the top. _____

2. Predict the results of 10 trials and 100 trials. Report your predictions as the fraction of the total you think will result in a favorable outcome, or favorable event. For example, the coin will land heads up about $\frac{1}{2}$ of the time, or the die will land with a 4 on the top about $\frac{1}{6}$ of the time.

Event	10 trials		100 trials		1,000 trials
	Prediction	Result	Prediction	Result	Prediction

3. Perform 10 trials. Record the results first with tally marks on a separate piece of paper and then in the table as a fraction.
4. Repeat for 100 trials. Record the results first with tally marks on a separate piece of paper and then in the table as a fraction.
5. How do your predictions compare with the actual results?

6. Predict the results for 1,000 trials, and explain your prediction.

7. On the back of this page, name two ways you and your partner could get data on the actual results for 1,000 trials.