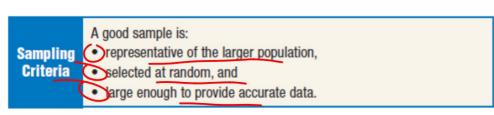
Basic Algebra 1.6
Collect and organize data using sampling
Collect and organize data using frequency tables
data information
sample each please of info
frequency table way to organize info
tally marks

tally marks



n at least 30

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One hundred people in Lafayette, Colorado, were asked to eat a bowl of oatmeal every day for a month to see whether eating a healthy breakfast daily could help reduce cholesterol. After 30 days, 98 of those in the sample had lower cholesterol. Is this a good sample? Explain. Source: Quaker Oats

Your Turn

Determine whether each is a good sample. Explain.

- a. Two hundred students at a school basketball game are surveyed to find the students' favorite sport.
- Every other person leaving a supermarket is asked to name their favorite soap.

In an experiment, students "charged" balloons by rubbing them with wool. Then the students placed the balloons on a wall and counted the number of seconds they remained. The class results are shown in the chart at the right. Make a frequency table to organize the data.

Time	freq.	
10-19 20-29 20-39 40-49 50-59	11 111 1411 111 111	3 11 7 3 1

		Elect			Þ
15	52	26	22	25	
28	29	33	36	20	t
43	21	30	39	34	
35	27	28	42	35	
16	18	21	21	40	

goal: 4-8 categories

Your Turn

c. Make a frequency table to organize the data in the chart at the right.

noon Temp	frog
10-14	11
15-19	100
20-24	1111
72-76	1)1
30-34	11()
35 - 39	1

ı	Noon	Tempe	ratur	e (°C)
32	30	18	29	20	14
21	32	36	15	19	$\overline{10}$
16	22	25	30	26	21

Static Electricity			
Time (s)	Frequency	Cumulative Frequency	
15–24	8	8	
25-34	9	17	
35-44	7	24	
45–54	1	25	

Cumulative: running total (so far)

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Owners of a restaurant are looking for a new location. They counted the number of people who passed by the proposed location one afternoon. The frequency table at the right shows the results of their sampling.

A. Which two groups of people passed by the location most frequently?

Age of People	Tally	Frequency	
under 13	ШШ	7 .	
teens	шш	0	
20s	ШЖЖЖ	18	
30s	mmmm mmmmm II	42	
40s	mmmmi mmmmi	36	
50s	IIII IIII IIII IIII	19	
60s	וזיינויינו	11	

B. If the restaurant is an ice cream shop aimed at teens during their lunchtimes, is this a good location for the restaurant? Explain.