

9

Family Letter

Dear Parent or Guardian:

"When am I ever going to use this stuff?" Students in math classes often ask this question. To students, math often seems to be a series of procedures that they learn and use to solve one particular type of problem—without having any application to the real world. In our math class, however, we try to take mathematics beyond the classroom to a point where students will realize and appreciate its importance in their daily lives.

In **Chapter 9, Statistics**, your child will learn to make a table when solving some problems, about histograms, circle graphs, measures of central tendency and range, measures of variation, box-and-whisker plots, to select an appropriate display, and about misleading statistics. In the study of this chapter, your child will complete a variety of daily classroom assignments and activities and possibly produce a chapter project.

By signing this letter and returning it with your child, you agree to encourage your child by getting involved. Enclosed is an activity you can do with your child that practices how the math we will be learning in Chapter 9 might be tested. You may also wish to log on to **www.msmath3.com** for self-check quizzes and other study help. If you have any questions or comments, feel free to contact me at school.

Sincerely,

Signature of Parent or Guardian _____ Date _____

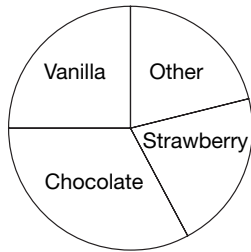
9 Family Activity

State Test Practice

Fold the page along the dashed line. Work each problem on another piece of paper. Then unfold the page to check your work.

1. A survey was taken of students at Huckleberry Middle Schools to determine their favorite ice cream flavors. The following graph shows the results of that survey.

Favorite Ice Cream Flavors



About what percentage of students prefer vanilla ice cream?

- A 33% C 50%
 B 20% D 25%

2. The following data table shows information collected during Amy Jo's science experiment.

Day	High Temperature
Monday	80°
Tuesday	75°
Wednesday	77°
Thursday	88°
Friday	93°
Saturday	99°
Sunday	81°

What kind of graph would be best to show Amy Jo's data?

- A a bar graph C a circle graph
 B a line graph D a histogram

Fold here

Solution

1. *Hint: Relate the fraction of the circle that represents the students who prefer vanilla to the corresponding percentage.*

We can estimate from the circle graph that about $\frac{1}{4}$ of the students prefer vanilla ice cream. A proportion can be used to calculate the corresponding percent.

$$\frac{1}{4} = \frac{?}{100}$$

4 is multiplied by 25 to get 100, so in order to make the proportion, 1 must be multiplied by 25.

$$\frac{25}{100} = 25\%$$

The answer is **D**.

Solution

2. Each type of graph listed can be best used for certain types of situations.

A bar graph is most useful to show the number of items in specific categories.

A line graph is used to show a slow change over a period of time.

A circle graph compares the parts of the data to the whole.

A histogram is used to show the frequency of data divided into equal intervals.

In this case, we have a small variation in temperature over a period of time, so a line graph is the best choice.

The answer is **B**.