

Name: _____

PIE CHART

Use a pie chart to illustrate numbers expressed in percent of a whole.

A pie chart is a circle divided into wedge-shaped sections. The circle represents 100 percent. Wedges inside that circle represent data that are a percent of the whole. In a recent survey, 987 students, ages 8 through 15, were asked how often they use the Internet. Their answers fell into the following categories: At least once a week; At least once a day; Rarely. Suppose you were to graph the survey results on a pie chart: The total number of responses represents 100 percent, and each category of response represents a different wedge of the pie chart.

TO MAKE A PIE CHART:

1. Use a compass to draw a circle.
2. Give the pie chart a title (“How Often Students Ages 8 Through 15 Use the Internet”).
3. Mark the center of the circle with a point; this is where each pie “slice,” or wedge, will start.

4. Measure a wedge for each independent variable (At least once a week; At least once a day; Rarely). To begin, convert your data from percents to angle degrees.

Example: 28 percent of the students surveyed answered “At least once a week,” so the pie wedge for that response category would be 28 percent of the 360° circle, or 101° ($360 \times .28 = 100.8$, rounded to 101). Position a protractor at the center point of the circle. Mark 0° and 101° angles with points on the edge of the circle. Draw a line from these points to the center of the circle.

5. Label the wedge (include its percent).

6. Measure your next wedge from the edge of the first. When you’re finished, the entire circle should be filled and the wedges should add up to 360°.

Your Turn:

In the survey, 61 percent of the students answered “At least once a day,” and 11 percent answered “Rarely.” Use this data to complete the pie chart below.

How Often Students Ages 8 Through 15 Use the Internet

