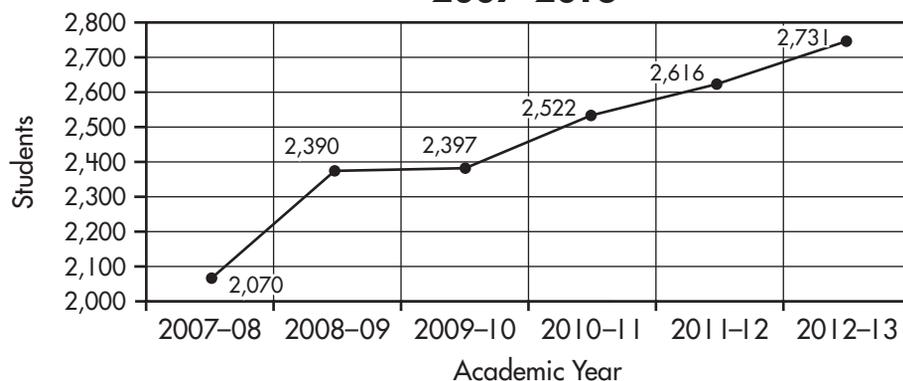


Lesson 5.5 Line Graphs

A **line graph** shows how two variables relate to each other and how they change over time. The line graph at right shows the specific values at each data point.

A line graph shows data trends over time that may help you to make predictions. This could help to analyze or solve a problem. For example, Pelworth Technology School may need to look closely at enrollment data to adjust staffing for future enrollments.

Pelworth Technology School Enrollment, 2007–2013



When analyzing data, you may need to calculate the percent of increase or decrease from one period to another. Remember that a percentage increase or decrease is in relation to the original value. Use the formula below:

$$\frac{\text{amount of increase or decrease}}{\text{original amount}} = \text{percent increase or decrease}$$

Refer to the line graph above to answer the following questions.

1. What information does the graph show during the time period? _____
2. What general trend does the graph show from the academic year 2007–2008 to 2012–2013? _____
3. Which academic years do not follow this general trend? _____
4. Calculate the enrollment change from 2007–2008 to 2012–2013. Round your answer to the nearest whole percent.

5. Based on the percent of change you calculated in question 4, estimate the enrollment for the school in another 6 years.
