Reading a Line Graph

Learning the Skill

Line graphs are a way of showing numbers visually and how amounts change over time. The amounts being measured are plotted on a grid above each year and then are connected by a line. By looking at the direction of the line—whether it goes up or down over time—you can easily see if the amount is increasing or decreasing.

To read a line graph, follow these steps:

• Read the title of the line graph to help you know what to expect or look for.
• Note the information on the left side of the graph—the vertical axis. The amount being compared usually appears on this axis.
• Note the information along the bottom of the graph—the horizontal axis. Time (in years, months, or days, for example) often appears along this axis.
• Select a point on the line, and then note the date on the horizontal axis below this point and the quantity measured on the vertical axis.
• Follow the line in the graph from left to right, noting what the graph is telling you. Analyze the movement of the line (whether increasing or decreasing over time). Compare lines (if more than one is on the graph) to determine the point being made.

Practicing the Skill

Directions: The line graph below shows Russia’s population from 1989 through 2005. Study the graph, and then answer the questions that follow.

Russian Population

Chart, Graph, and Map Skills Activity

continued

1. **Identifying** In what year did the Russian population reach its peak?

2. **Identifying** Is the Russian population increasing or decreasing?

3. **Calculating** By how much did the population decline between 2001 and 2005?

✓ **Applying the Skill**

**Directions:** Study the line graph below, which shows Japan's population for roughly the same period of years as the previous graph. Use information from both graphs to answer the questions that follow.

![Japanese Population Graph]

1. **Identifying** In what year did the Japanese population reach its peak?

2. **Describing** Between 1990 and 2000, what happened to the populations of Russia and Japan?

3. **Explaining** What appears to be happening to the Japanese population?