Interpret Graphs and Maps

UNIT 1

1 Learn the Skill

Graphs and thematic **maps** are tools used to show data visually. Types of graphs include bar graphs, circle graphs, and line graphs. A thematic map focuses on a particular topic and shows relevant data for an area, a country, or even the world.

You can find, compare, and analyze data and identify trends quickly and easily by **interpreting graphs and maps**. Many graphs have an *x*-axis and a *y*-axis that identify variables related to the data. Titles, keys, and labels often are included on graphs and maps. All these features help you understand the data.
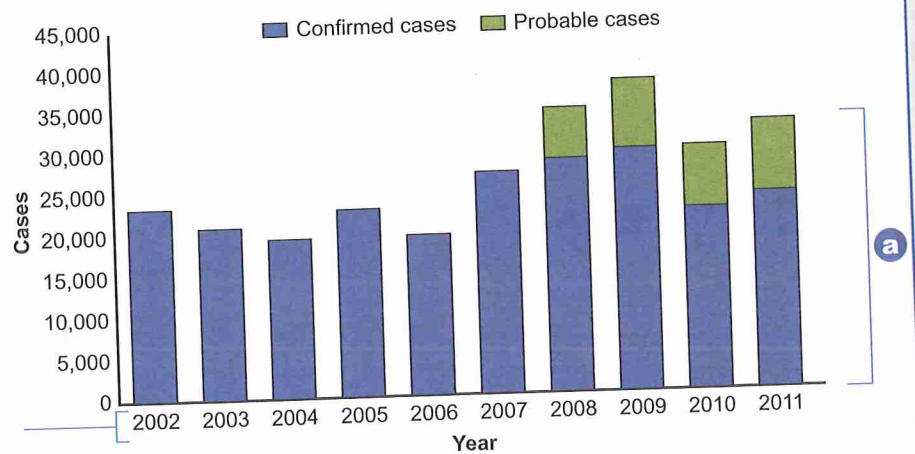
2 Practice the Skill

By practicing the skill of interpreting graphs and maps, you will improve your study and test-taking abilities, especially as they relate to the GED® Science Test. Study the information and graph below. Then answer the question that follows.

LYME DISEASE

Lyme disease is a bacterial infection that is spread through the bite of a tick. The tick picks up the infection from feeding on mice or deer that have the infection. The tick can then spread the infection to a person through a bite.

a A bar graph may be stacked, having bars that are divided to show subcategories. In this graph, the two subcategories are confirmed cases and probable cases.

b A bar graph compares data. This graph compares the number of cases of Lyme disease reported each year over a 10-year period.

REPORTED CASES OF LYME DISEASE BY YEAR, UNITED STATES, 2002–2011

Source: Centers for Disease Control and Prevention

1. According to the graph, in which year were the most confirmed and probable cases of Lyme disease reported?

   A. 2007
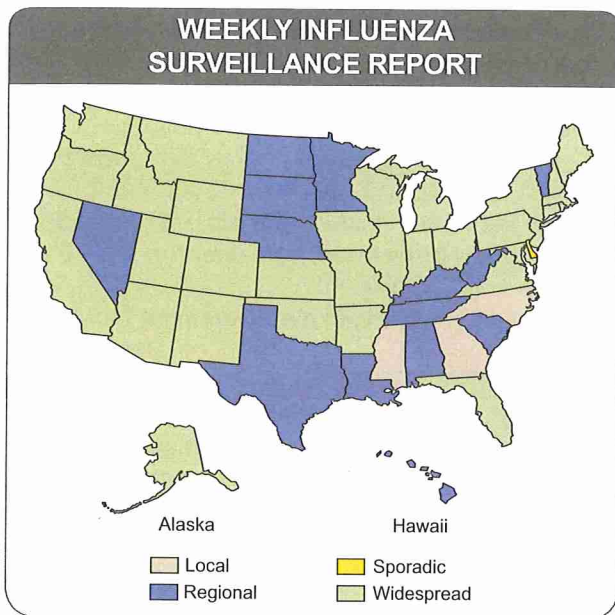   B. 2008
   C. 2009
   D. 2010

DIRECTIONS: Study the information and map, read the question, and choose the **best** answer.

INFLUENZA

Fever, cough, sore throat, headache, muscle aches, and vomiting—chances are you have had these symptoms at some point. They are symptoms of influenza, or the flu.

The flu is a respiratory illness caused by viruses. Every year, scientists predict which flu viruses will wreak the most havoc during the next flu season. Then they make vaccines against those strains and hope they have predicted correctly. Not everyone gets the flu vaccine, and not everyone who gets it avoids the flu.

The Centers for Disease Control and Prevention tracks estimated flu cases across the country each week to determine how the numbers of infected people are changing. The map shows the results from one week.
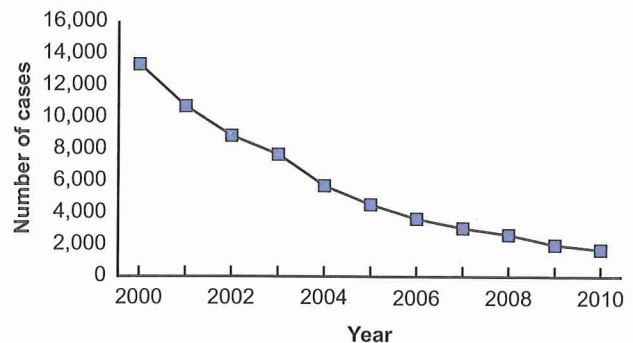
WEEKLY INFLUENZA SURVEILLANCE REPORT

Alaska   Hawaii

☐ Local   ☐ Sporadic
☐ Regional   ☐ Widespread

2. Which category of geographic spread of the flu applied to the most states during the week addressed by the map?

A. sporadic
B. local
C. regional
D. widespread

DIRECTIONS: Study the information and graph, read each question, and choose the **best** answer.

HEPATITIS

Hepatitis is a contagious liver disease caused by viruses. The three forms generally seen in the United States are hepatitis A, B, and C. The three types vary in how they are spread. Hepatitis A is spread when a person ingests fecal matter of an infected person. For example, if an infected person uses a public restroom but does not wash his or her hands, that person can pass on the infection to others in the public through even microscopic amounts of fecal matter. The fact that the spread of hepatitis A is easily prevented through proper hygiene is becoming more widely known.

ACUTE HEPATITIS A CASES, UNITED STATES, 2000–2010

Source: Centers for Disease Control and Prevention

3. Based on the graph, which statement describes the trend in the occurrence of hepatitis A cases in the United States between 2000 and 2010?

A. The number of cases decreased.
B. The number of cases stayed the same.
C. The number of cases increased.
D. The number of cases doubled.

4. Which assumption could be supported by the passage and the trend shown in the graph?

A. The number of viral infections is increasing due to fewer prevention options.
B. The hepatitis A virus is becoming weaker and less contagious.
C. Greater knowledge about control of the spread of hepatitis A has led to fewer infections.
D. Fewer people are going to the doctor when they have symptoms of hepatitis A.