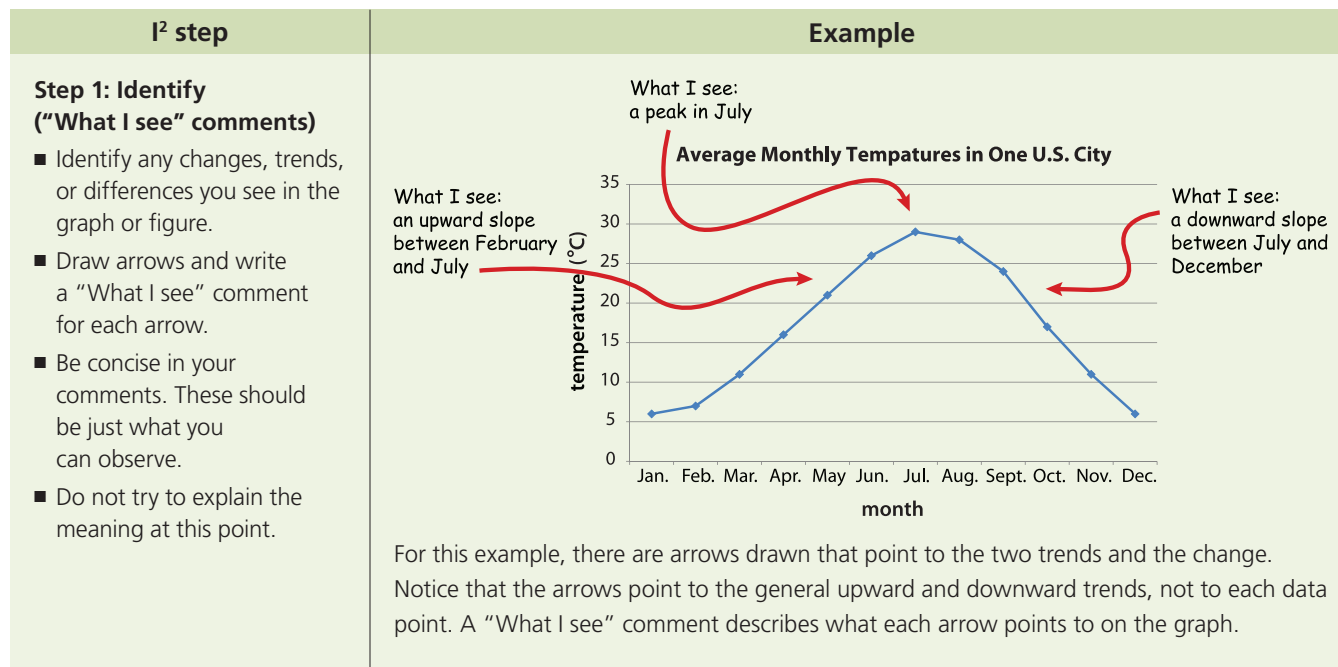# I Can Use the Identify and Interpret (I²) Strategy

Have you ever looked at a graph or figure and felt overwhelmed by it? Often there is a lot of information on graphs and in figures. The Identify and Interpret (I²) strategy helps you make sense of graphs, figures, sketches, and other ways to represent data. This strategy helps you break down the information into smaller parts. To do this, you first *identify* what you see in the graph or figure. Then you *interpret* each of those observations by deciding what they mean.

Once you have determined what the smaller parts of the graph or figure mean, you are ready to put all the information together. To do this, you write a *caption*. You have probably seen captions under figures in textbooks or magazines. Captions are a summary of the information in the graph or figure. They are written in complete sentences. Captions help you show your understanding of the material you are studying.

To help you understand how to use the I² strategy, look at the following example. This example will help you make sense of a graph. This graph shows the average monthly temperatures in one US city.

I² step	Example
Step 1: Identify ("What I see" comments) ■ Identify any changes, trends, or differences you see in the graph or figure. ■ Draw arrows and write a "What I see" comment for each arrow. ■ Be concise in your comments. These should be just what you can observe. ■ Do not try to explain the meaning at this point.	 For this example, there are arrows drawn that point to the two trends and the change. Notice that the arrows point to the general upward and downward trends, not to each data point. A "What I see" comment describes what each arrow points to on the graph.

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I² step	Example
Step 2: Interpret ("What it means" comments) ■ Interpret the meaning of each "What I see" comment by writing a "What it means" comment. ■ Do not try to interpret the whole graph or figure.	What I see: a peak in July What it means: the hottest average temperatures in the city happen in July. What I see: an upward slope between February and July What it means: The average temperature in the city increases between February and July. **Average Monthly Tempatures in One U.S. City** What I see: a downward slope between July and December What it means: The average temperature in the city decreases between July and December. In this example, "What it means" comments were added to each "What I see" comment. The "What it means" comments explain the changes, trends, and differences that were identified in Step 1.

I² step	Example
Step 3: Caption ■ Write a caption for the graph or figure. ■ Start with a topic sentence that describes what the graph or figure shows. ■ Then join each "What I see" comment with its "What it means" comment to make a sentence. ■ Build a coherent paragraph out of your sentences.	What I see: a peak in July What it means: The hottest average temperatures in the city happen in July. The city must be in the northern hemisphere. What I see: an upward slope between February and July What it means: The average temperature in the city increases between February and July. **Average Monthly Tempatures in One U.S. City** What I see: a downward slope between July and December What it means: The average temperature in the city decreases between July and December. This graph shows the average temperature in a city over a year. There is an upward slope from February to July, showing that there is an increase in the average temperature during these months. There is a downward slope from July to December, which means the average temperature decreases during this time. There is a peak in July, which shows that the hottest average temperature in the city happens in July. The peak in July also means that the city must be in the Northern Hemisphere. In this example, the first sentence of the caption describes what the graph shows. Then each "What I see" comment was combined with its "What it means" comment to form complete sentences. Those sentences make up a paragraph that describes each part of the graph.

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