Step 1

WIS: What I See

1. **Draw an arrow** to any place where the graph changes or differs.

*BSCS Science Learning studies have found that having students draw the arrows is critical to developing their understanding.*
In the WIS step, students identify trends, changes, or differences in data. They draw an arrow to each observation.

**Step 1**

**WIS: What I See**

2. Label each arrow with a **WIS statement**.

**WIS:**
The highest point on the graph is on Friday.

**WIS:**
The line goes up between Wednesday and Friday.

**WIS:**
The line goes back down from Friday until Sunday (the end).

You can provide a “WIS” prompt box to be filled for each arrow.
Step 2

WIM: What It Means

3. Write a WIM explanation for each WIS statement.

**WIS:** The line goes up between Wednesday and Friday.

**WIM:** Temperature increased each day from Wednesday til Friday.

**WIS:** The highest point on the graph is on Friday.

**WIM:** The temperature was hottest on Friday.

**WIS:** The line goes back down from Friday until Sunday (the end).

**WIM:** Temperature decreased each day from Friday until Sunday.

In the WIM step, students interpret the meaning of their observations.

*Do NOT try to interpret the entire graph with a single WIM statement.*
WIS, WIM can be applied to data tables.

<table>
<thead>
<tr>
<th><strong>Our Favorite Pets</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pet Types</strong></td>
<td><strong>Number of Pets</strong></td>
</tr>
<tr>
<td>Cat</td>
<td>18</td>
</tr>
<tr>
<td>Dog</td>
<td>16</td>
</tr>
<tr>
<td>Rabbit</td>
<td>2</td>
</tr>
<tr>
<td>Turtle</td>
<td>4</td>
</tr>
<tr>
<td>Bird</td>
<td>6</td>
</tr>
</tbody>
</table>

WIS: There is a big number for cats.

WIM: Many more students like cats than other pets.

WIS: Rabbits have the smallest number.

WIM: Not many students have rabbits as pets.

WIS: There is a big number for dogs.

WIM: A lot of students like dogs (more than other pets).

Search for “WIS WIM Part 1” on YouTube to see a demonstration.