## **Purple or Orange?**



Below are graphical representations of the number of hits last season by members of the Purple and Orange teams.

Hard Hitting Harold ( $H^3$  for short) has offers to join either the Purple team or the Orange team.  $H^3$  had 100 hits last season.

As a local sports reporter, you have received the task of analyzing the impact for each team, should H<sup>3</sup> join either the Purple or the Orange team. You must base your analysis on what you can gather from the graphical representations you have received.

Use either a word processor to create a flyer or presentation software to create a slide show that will communicate your interpretations. Copy and paste the graphical representations into your flyer or slide show and use the drawing tools to help make your points. Your flyer or slide show should answer the following questions.

- 1. From the given graphical representations, what do you know about the spread of the data (numbers of hits per player) for the Purple team? for the Orange team? (Include a "discussion" of any clusters, gaps, and/or outliers.)
- 2. Should H<sup>3</sup> join the team, how would his number of hits (100) impact the current spread of the data for the Purple team? for the Orange team?
- 3. From the given graphical representations, what do you know about the current range, median, and mean number of hits for the Purple team? for the Orange team?
- 4. Should H<sup>3</sup> join the team, what would be the impact on the range, median, and mean number of hits for the Purple team? for the Orange team?
- 5. In your opinion, which team would benefit the most from having H<sup>3</sup> join their team?
- 6. As an added note or disclaimer, compare and contrast the amount and type of information you were able to get from the histogram versus the box and whisker plot when you addressed questions #1 and 3. What information might you get from a histogram that you would not get from a box and whisker plot? What information might you get from a box and whisker plot that you would not get from a histogram?