

### ***What's Your Favorite Sport?***

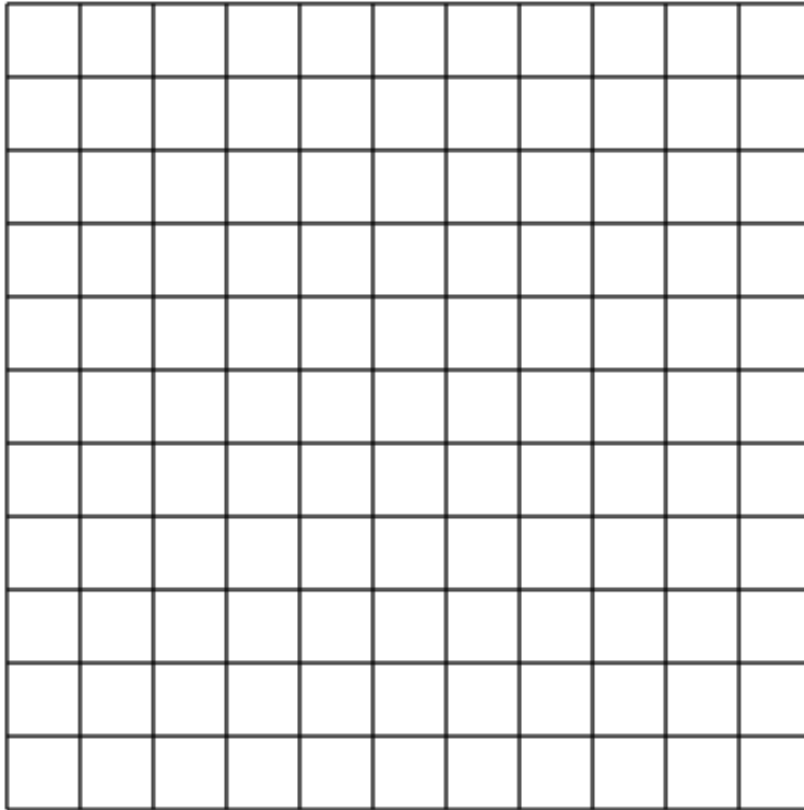
What is your favorite sport? \_\_\_\_\_

Wait, do I mean your favorite sport to play or your favorite sport to watch? Does it matter? Are they the same sport or different? How does your list of favorite sports to play associate or correlate with your favorite sports to watch?

1. In the table below rank each sport from your favorite (#1) to least favorite (#8). Rank your favorite sports to play in the playing rank column. Rank your favorite sports to watch in the watching rank column. We have also added two additional rows in case your entire class wants to add an additional sport or two.

<b>Sport</b>	<b>Playing Rank</b>	<b>Watching Rank</b>
Baseball/Softball		
American Football		
Volleyball		
Basketball		
Tennis		
Golf		
Hockey		
Soccer (Football outside of the US)		

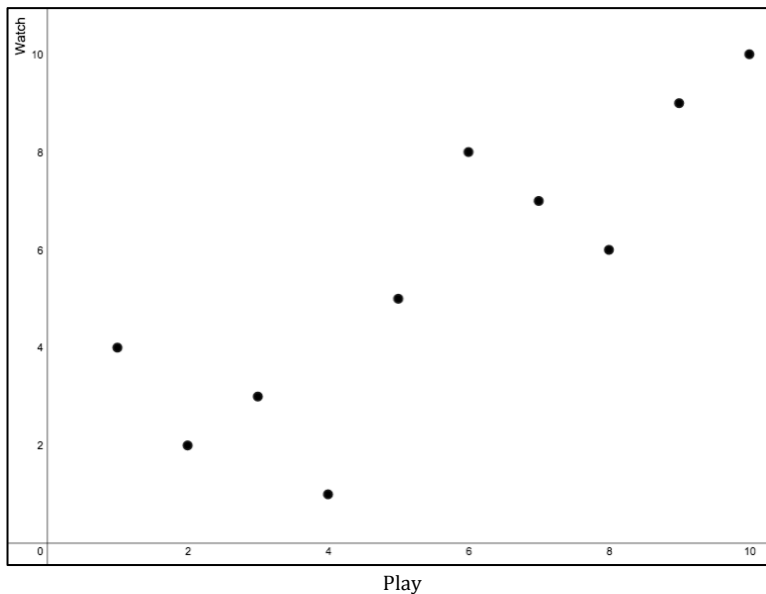
2. Now plot your two columns of data on the grid below. On the x-axis plot the rank for sport to play and on the y-axis plot the corresponding sport's rank for sport to watch. For example, if you said basketball was your favorite sport to play and your second favorite sport to watch you would plot the point (1, 2) on the grid. Make sure to label your x and y axis.



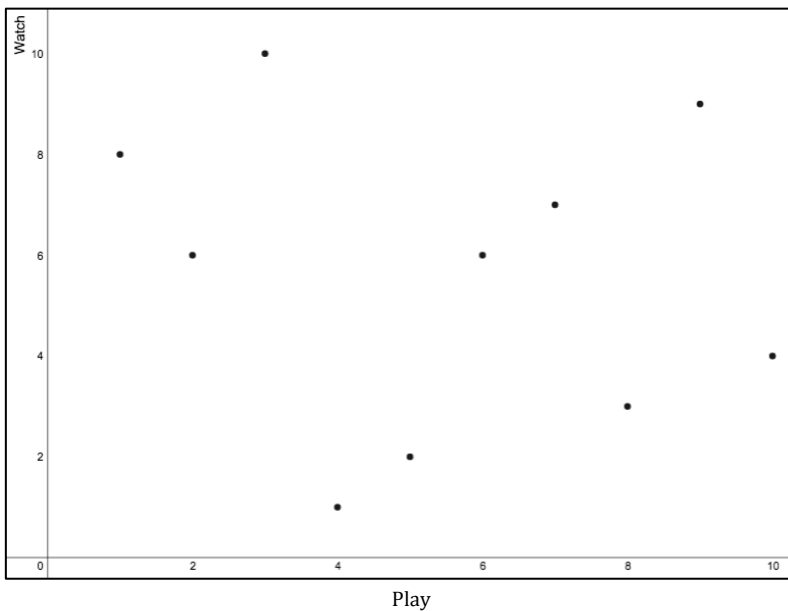
3. How do your favorite sports to play associate or correlate with your favorite sports to watch? Do you see an association or correlation? If so, is it positive or negative, and what does that mean in this context?

4. Take time to do a gallery walk of scatter plots made by your classmates. What can you tell from looking at plot? Which of your classmates has the strongest association or correlation between variables? Which has the weakest? How can you quickly tell from the graph? What do you look for?

5. The scatterplot below shows one student's relationship between favorite sports to play and watch. What can you tell from this plot?



6. The scatterplot below shows another student's relationship between favorite sports to play and watch. What can you tell from this plot?



7. What would a scatter plot look like if a student had as strong of association as possible between favorite sports to play and favorite sports to watch?