

## Scatter Plot Paired Rankings Activity

Names \_\_\_\_\_ Date \_\_\_\_\_

This activity is designed to help you to apply scatterplots and correlation. In order to complete the activity you will need a partner. Both of your names should appear above.

### Steps:

- Before finding a partner, rank the following ten cafeteria foods in order from the food you like the most to the food you like the least.

1. Pizza
2. Calzone
3. Hamburger
4. Fries
5. Pretzel
6. Salad
7. Cookies
8. Chicken Sandwiches
9. Ice Cream
10. Popsicles

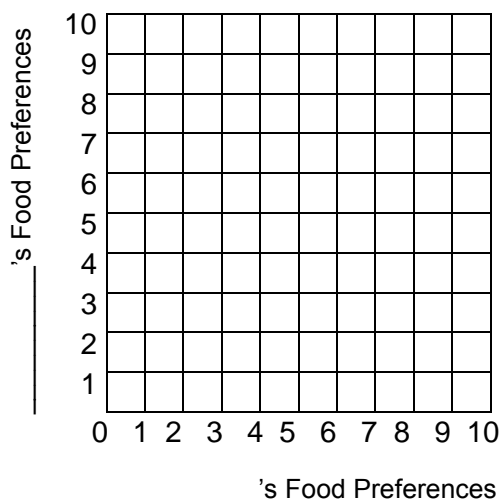
Record your preferences below:

The number of the food I like the most is: \_\_\_\_\_  
 The number of the food I like 2<sup>nd</sup> most is: \_\_\_\_\_  
 The number of the food I like 3<sup>rd</sup> most is: \_\_\_\_\_  
 The number of the food I like 4<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like 5<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like 6<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like 7<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like 8<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like 9<sup>th</sup> most is: \_\_\_\_\_  
 The number of the food I like the least: \_\_\_\_\_

- Now get together with your partner. Write your responses for the 10 items above as ordered pairs. For example, if your 1<sup>st</sup> favorite food is pizza and your partner's favorite food is Fries, write the ordered pair (1, 4). Then go on to the food you both like second most. You will have 10 ordered pairs. Whoever uses their choice as the x-coordinate should remain the x-coordinate for all 10 ordered pairs.

List the ordered pairs here: \_\_\_\_\_  
 \_\_\_\_\_

- Plot your 10 points on the coordinate plane below.



### 4. Analyze the Data:

- The stronger the positive association, the more likely you and your partner would enjoy going out to eat together.
- The stronger the negative association, the less likely you and your partner would enjoy going out to eat together.
- If the association is weak, then your agreement on dinner would be hit and miss.

What conclusions can you draw based upon your scatterplot?

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