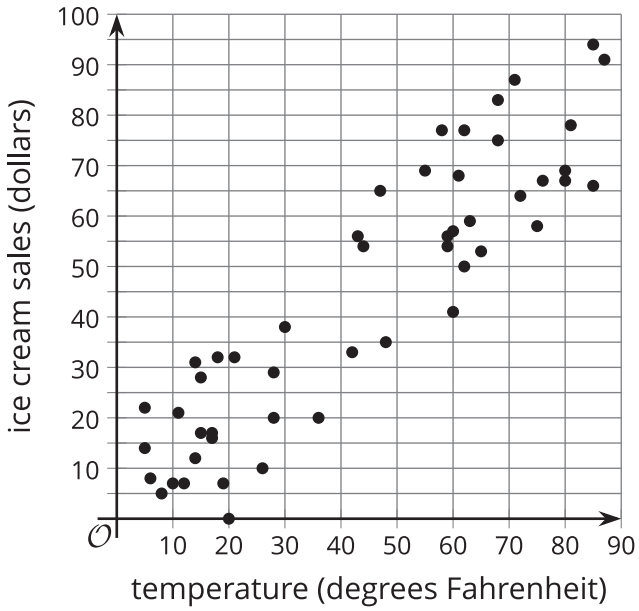
Unit 3, Lesson 8

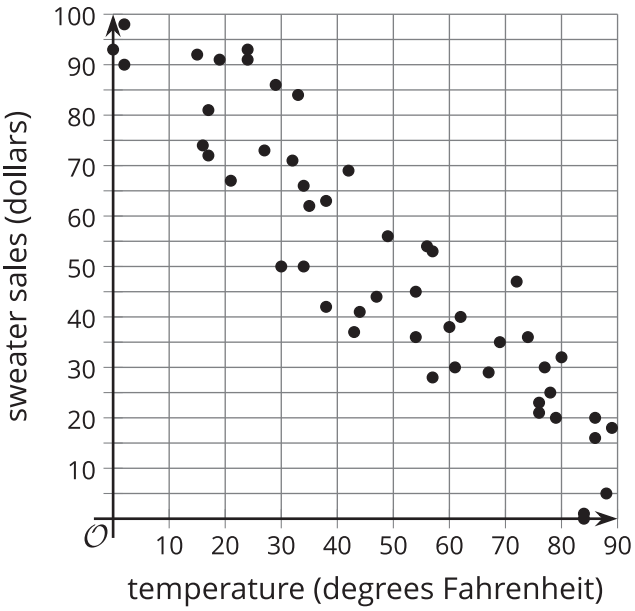
Correlations

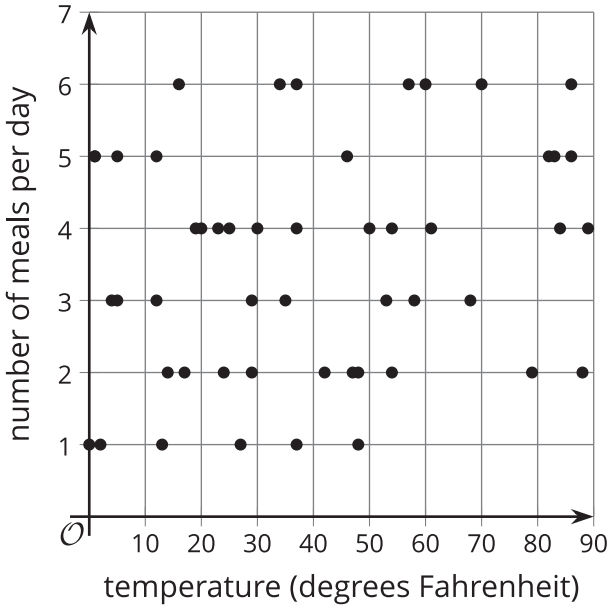
Let's explore correlations.

8.1 Notice and Wonder: Correlations

What do you notice? What do you wonder?







8.2 Variable Relationships

1. For each pair of variables, do you expect there to be a relationship? That is, do you think a change in one variable is accompanied by a change in the other variable? How do you expect the second variable to change if the first variable is increased?

   a. hours of sleep and energy level

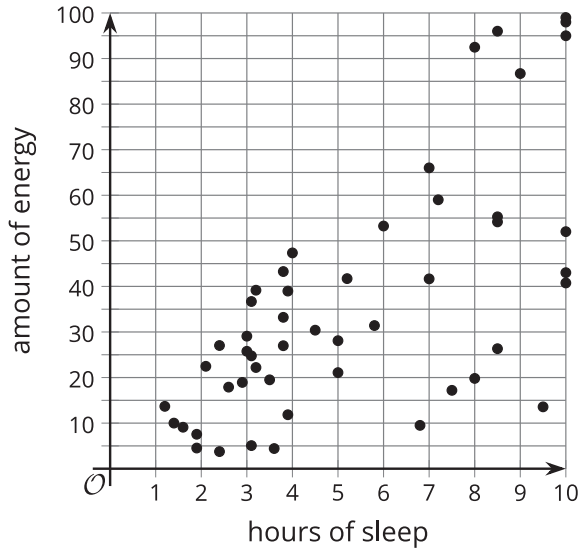
   b. length of hair and energy level

   c. number of school events each week and time spent watching videos online each week

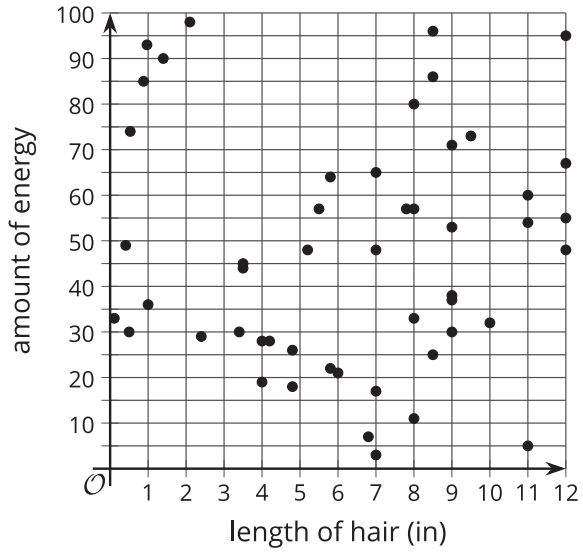
   d. temperature and watermelon sales

2. Some data is collected for each pair of variables listed and represented by a scatter plot. For each pair of variables, how do the scatter plots support or contradict your answers from the previous question?

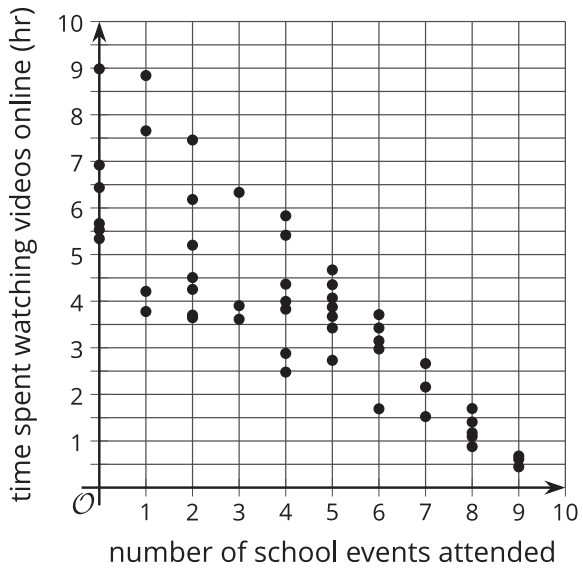
a.



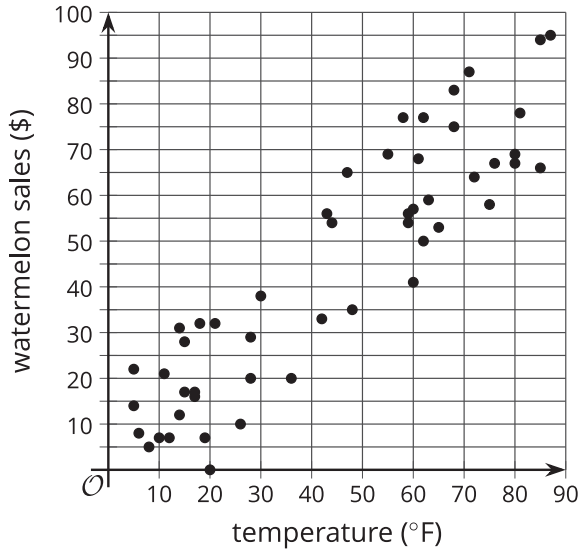
b.



c.



d.



8.3 Card Sort: Correlations

Your teacher will give you a set of cards. Take turns with your partner to match each scatter plot with a pair of variables.

1. For each match that you find, explain to your partner how you know it's a match.
2. For each match that your partner finds, listen carefully to the explanation. If you disagree, discuss your thinking and work to reach an agreement.