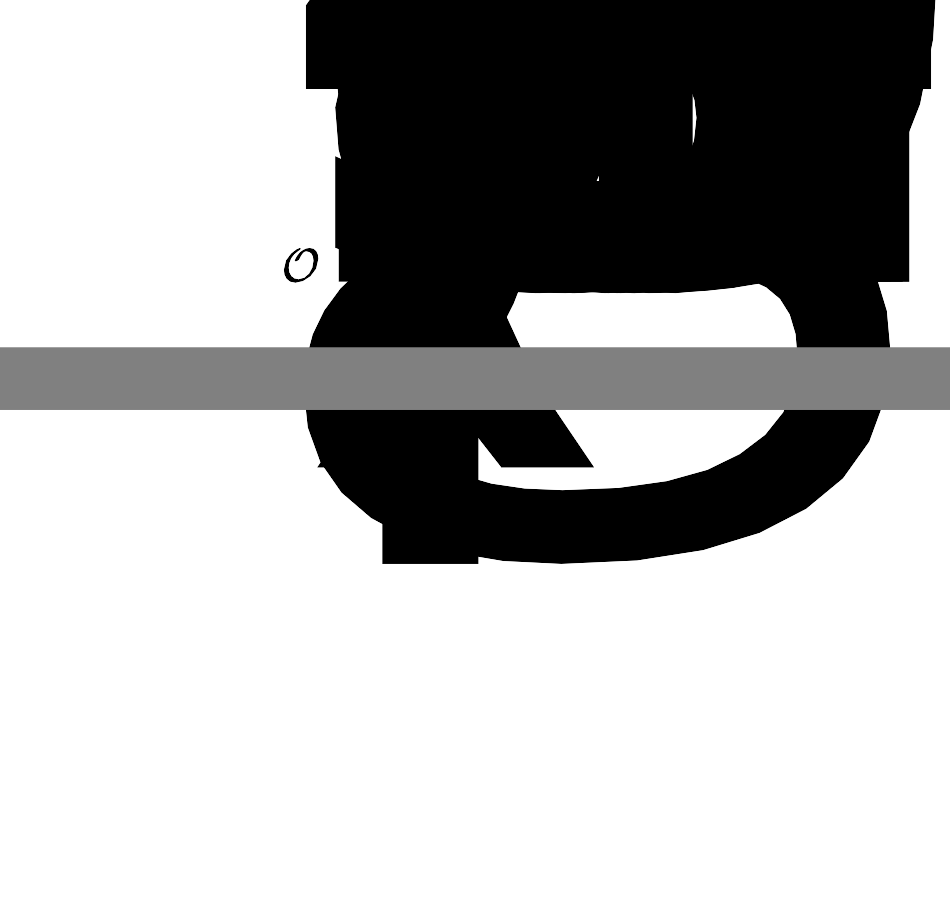
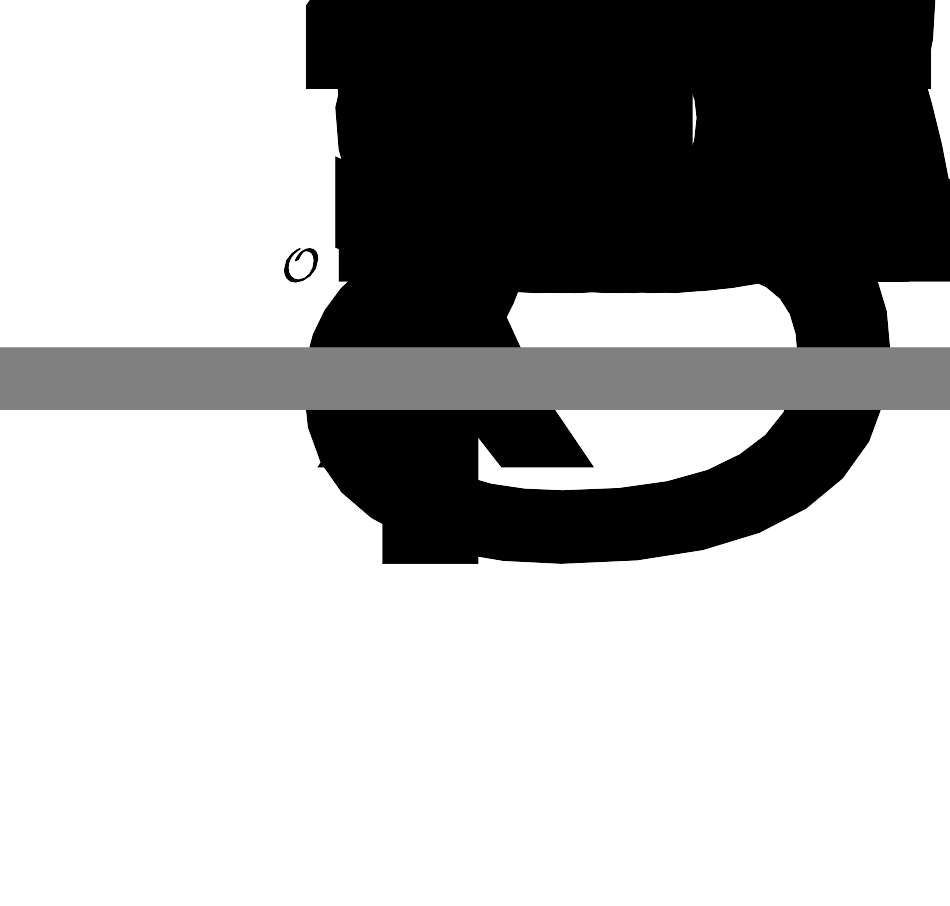
## Unit 3 Lesson 8: Correlations

### 1 Notice and Wonder: Correlations (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?



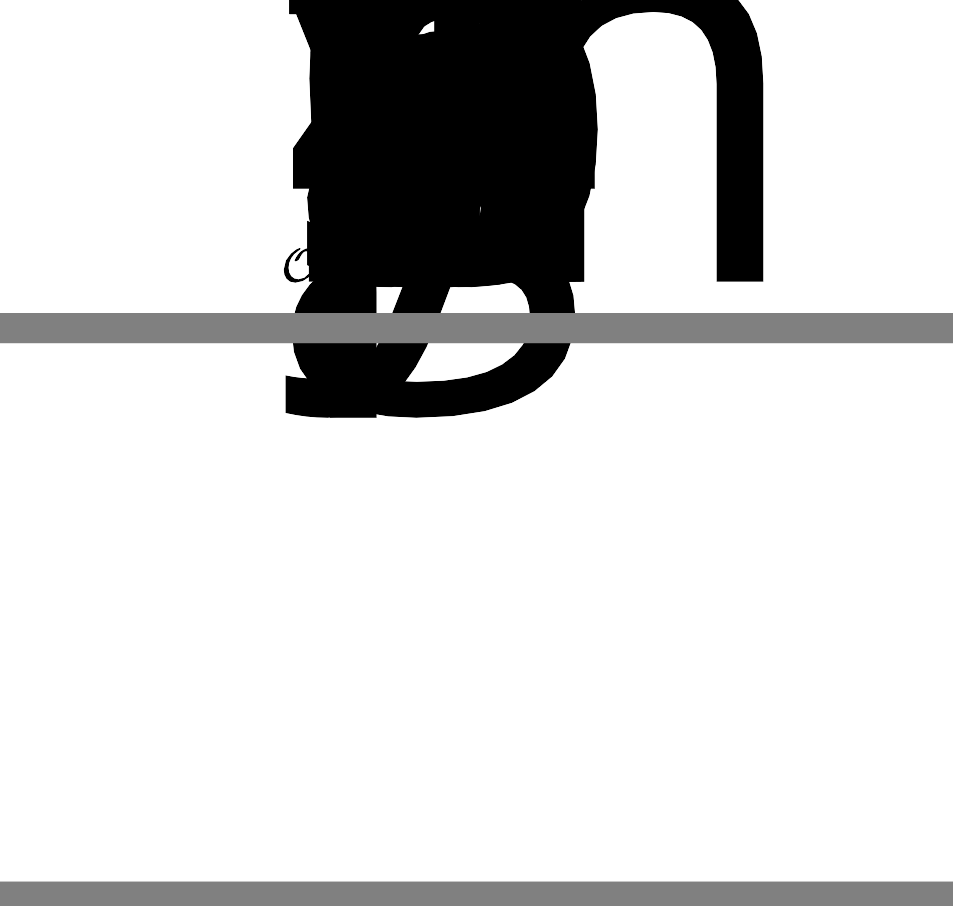
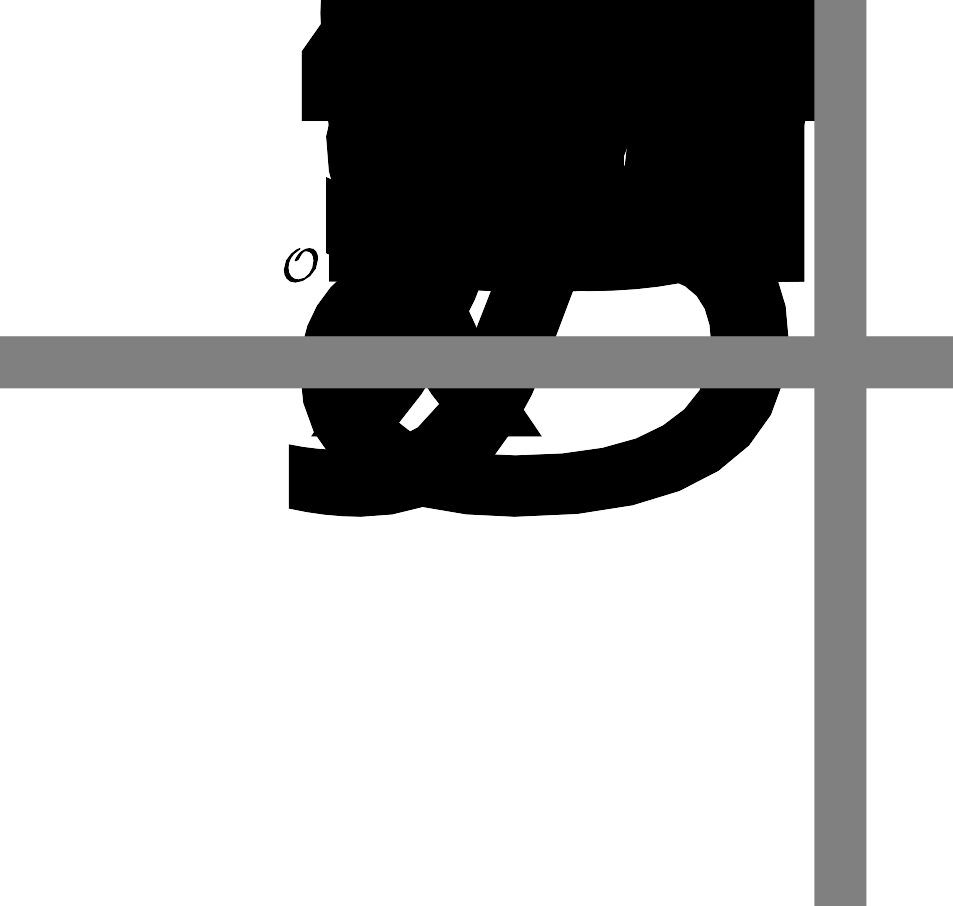
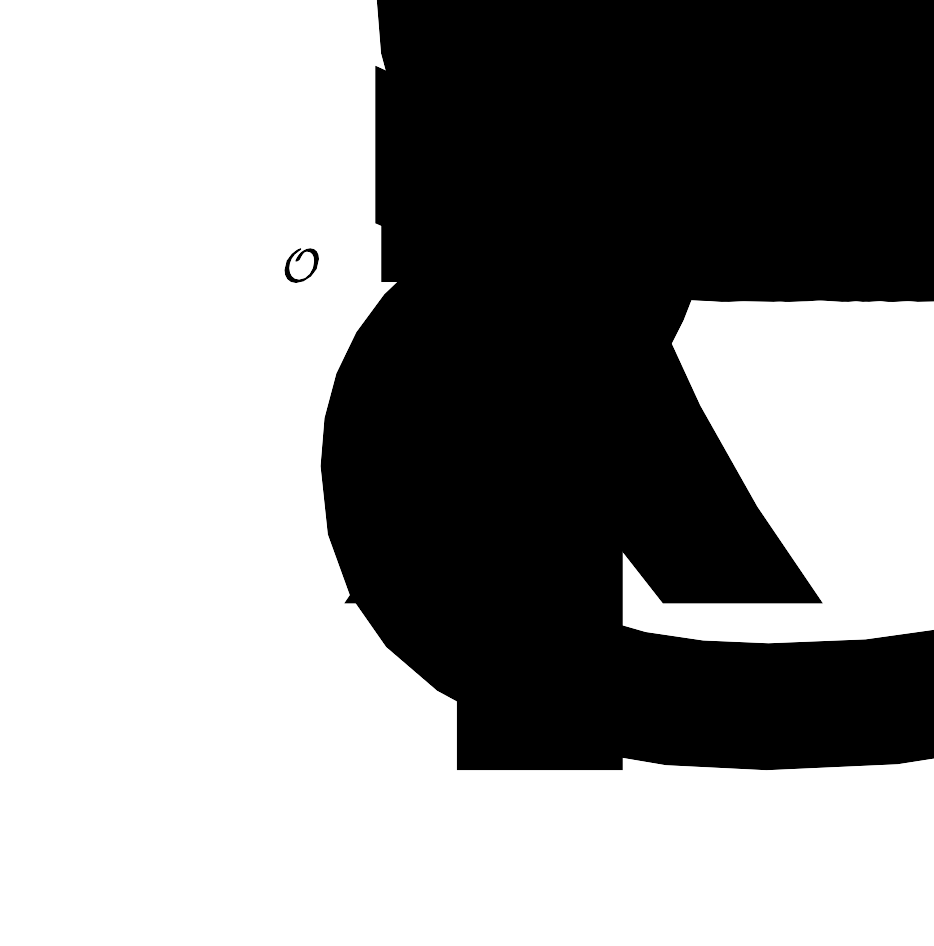
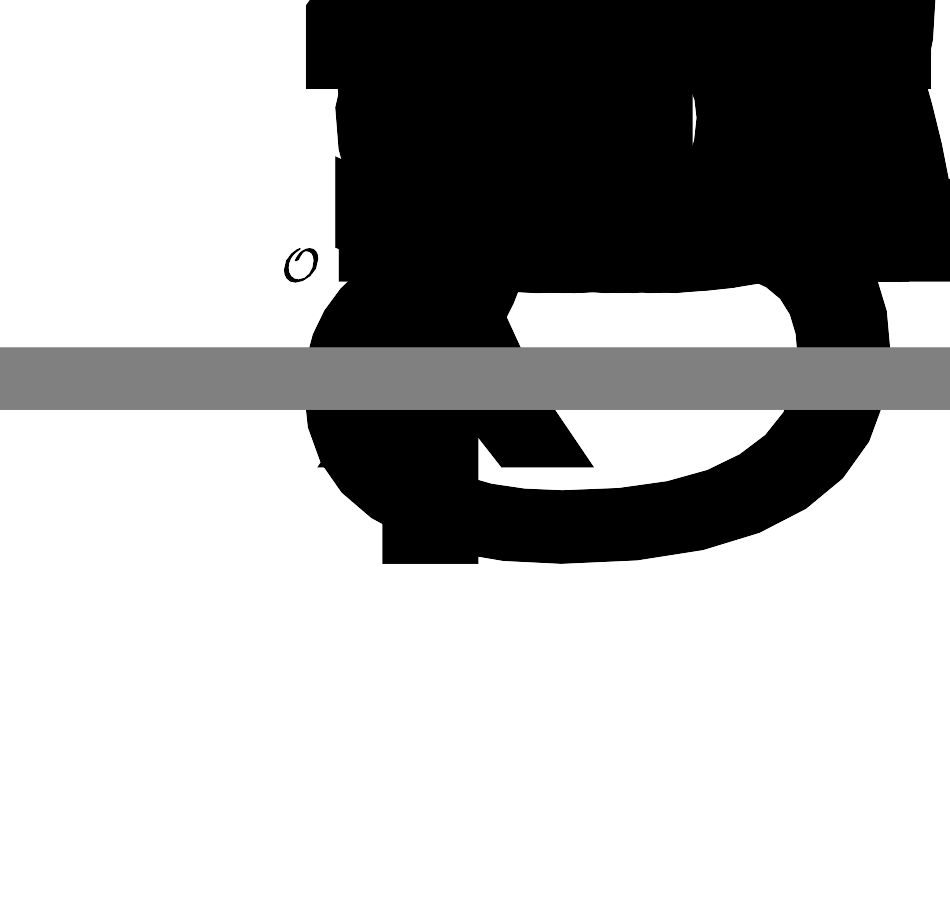




### 2 Variable Relationships

#### Student Task Statement



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?
   1. hours of sleep and energy level
   2. length of hair and energy level
   3. number of school events each week and time spent watching videos online each week
   4. 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?
   1. 
   2. 
   3. 
   4. 

### 3 Card Sort: Correlations

#### Student Task Statement

Your teacher will give you a set of cards. Match each scatter plot with a pair of variables. Be prepared to explain your reasoning.



© CC BY 2019 by Illustrative Mathematics®