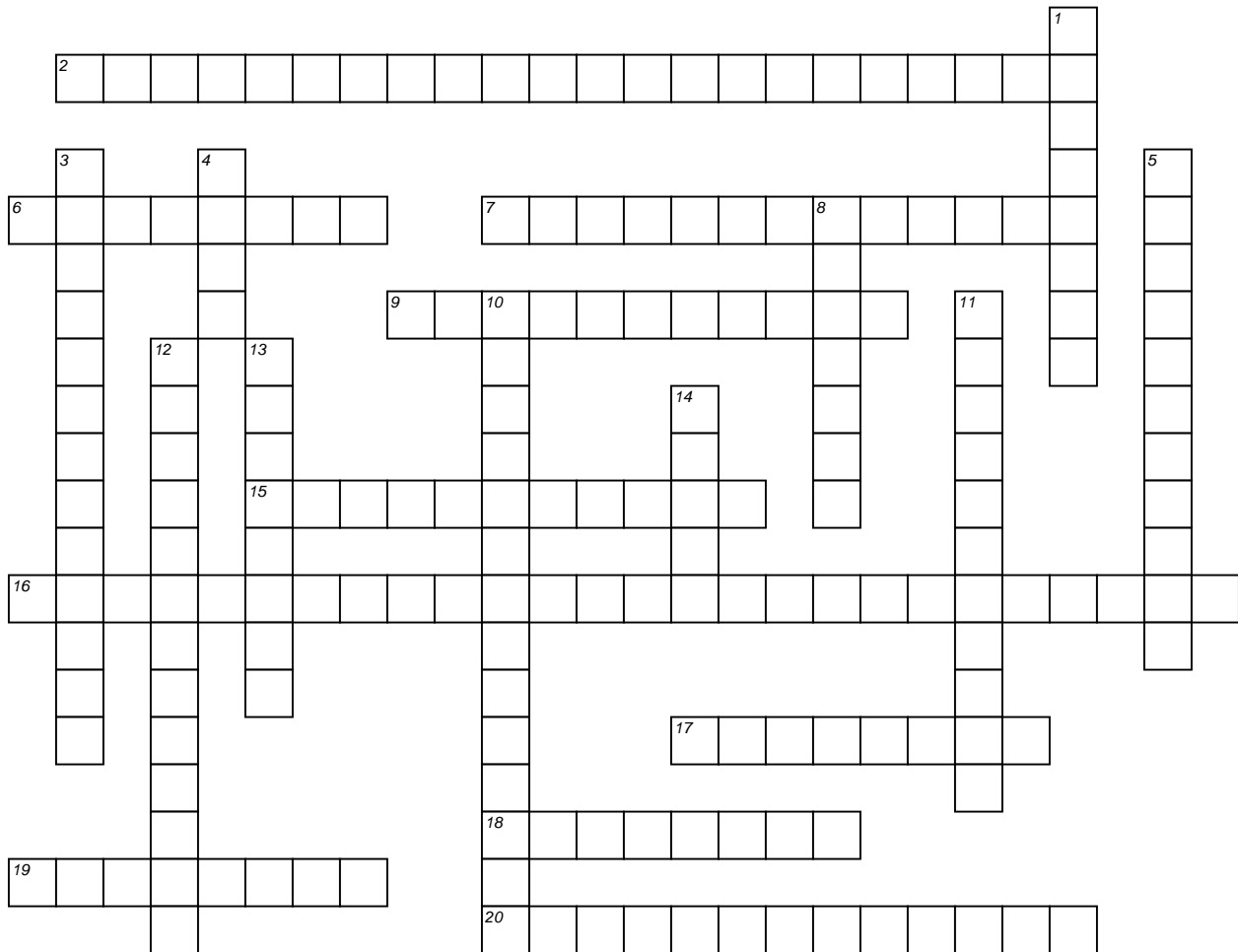


# Exploring Relationships Between Variables

## *Advanced Placement Statistics*



Stats: Modeling the World, Chapters 7-10

### ACROSS

- 2** numerical measure of the direction and strength of a linear association
- 6** variable that you hope to predict or explain
- 7** predicting for values of  $x$  within the ones used to find the linear model equation
- 9** variable that accounts for, explains, predicts, or is otherwise responsible for the  $y$ -variable
- 15** relationship between two quantitative variables
- 16** overall measure of how successful the regression is in linearly relating  $y$  to  $x$
- 17** the difference between the actual data value and the corresponding value predicted by a model
- 18** data points whose  $x$ -values are far from the mean of  $x$  have a high amount of this
- 19** type of association where as one variable increases, so does the other
- 20** predicting for values of  $x$  far from the ones used to find the linear model equation

### DOWN

- 1** general measure of scatter around the underlying relationship between two quantitative variables
- 3** point on the scatterplot representing the mean  $x$ -value and mean  $y$ -value
- 4** shape of a scatterplot
- 5** shows the relationship between two quantitative variables measured on the same cases
- 8** a variable that is not explicitly part of a model but affects the way the variables in the model appear to be related
- 10**  $y$ -hat
- 11** point that when omitted, results in a very different regression model
- 12** least squares regression line
- 13** type of association where an increases in one variable generally correspond to decreases in the other
- 14** measures the change in the  $y$ -value per unit change in  $x$ -value