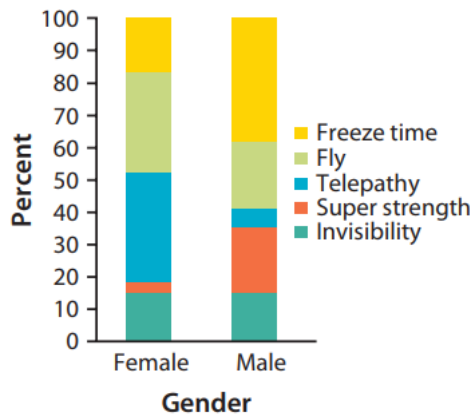


## 2.1 Relationships Between Two Categorical Variables Part 3

### 2.1 Relationships Between Two Categorical Variables (Part 3)

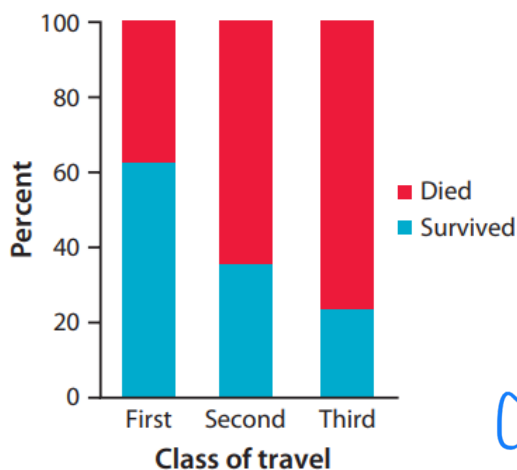
Once we make a graph, the final step is to determine whether there is an **association** between the two categorical variables.

There is an **association** between two variables if knowing the value of one variable helps us predict the value of the other. If knowing the value of one variable does not help us predict the value of the other, then there is no association between the variables.



Looking back at the example regarding gender and superpower preference, there appears to be an association between the two variables.

**Example:** Use the graph to determine if there is an association between survival status and class of travel for passengers on the *Titanic*. Explain your reasoning. If there is an association, briefly describe it.



There is an association between class & survival status.

First class had a higher chance of survival.

The lower in class you were, the higher chance you would not survive.