## Name: <br> 14.5 <br> Conditional Probability 2

$\qquad$ $\mathrm{Hr}:$ $\qquad$

Use the table below to answer questions 1 through 5.

|  | Adult | Child | Total |
| :--- | :---: | :---: | :---: |
| Vanilla | 52 | 26 | 78 |
| Chocolate | 41 | 105 | 146 |
| Total | 93 | 131 | 224 |

1. What percent of the people like chocolate?
2. What percent of the children like vanilla?
3. What percent of those that like chocolate are adults?
4. What percent of the people surveyed were children that liked chocolate?
5. Is chocolate more popular among children or adults? Explain your reasoning.

The following table represents data from a survey of people asking them if they slept better after eating a big meal. Data indicating whether or not the participants ate a big meal as well as whether or not they slept well is recorded in the table below.

Complete the table:

|  | Big Meal | Not a Big Meal | Total |
| :--- | :---: | :---: | :---: |
| Slept Well |  | 505 | 1517 |
| Didn't Sleep Well |  | 299 |  |
| Total |  |  | 2000 |

6. Of those that slept well, what percentage ate a big meal?
7. Of those that ate a big meal, what percentage slept well?
8. What is the sample space of this survey? (What are the possible responses?)
9. From the survey data, would you conclude that eating a big meal will help you sleep well? Why or why not?
