## Theoretical and Experimental Compound Probability

A new locker system for the school has a passcode program on each locker. Students need to input 2 numbers between 1 and 4 , followed by 1 symbols (\$ or \#).

1. Make a tree diagram below to show the possible passcodes that students can use.
2. How many unique passcodes are available for the students to choose from?
3. What is the theoretical probability that a student will choose a passcode with a
 number 3 in it? $\qquad$

Tree Diagram
4. Describe a way that you can simulate various passcodes

