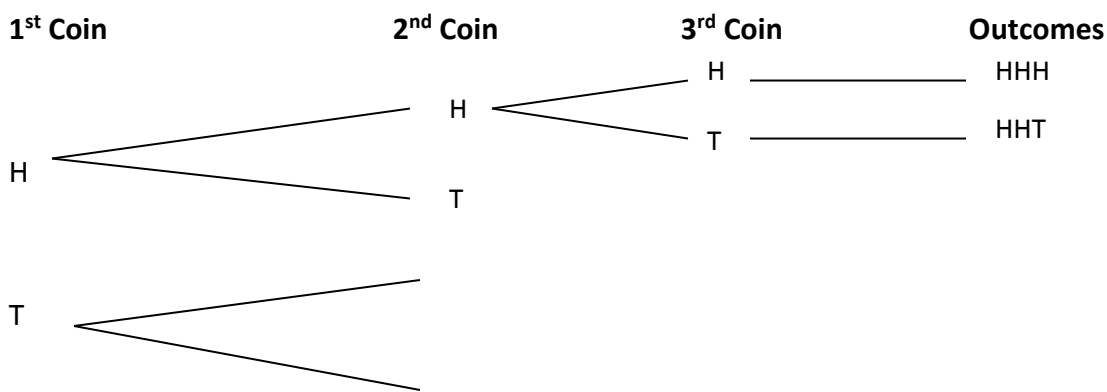


- **Compound Event** consists of two or more **simple events**.

EXAMPLE: Tossing 1 die is a simple event. Tossing 2 dice is a compound event.

EXAMPLE: If three coins are tossed, what is the probability of getting exactly 2 heads?

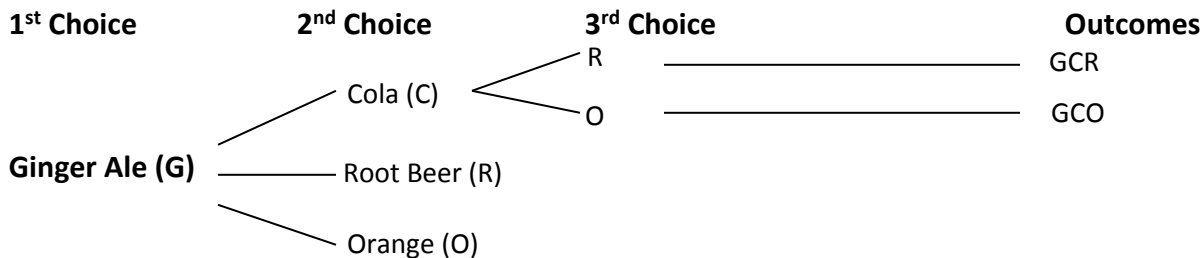
- To calculate the probability we need to know how many outcomes are possible. We will use a tree diagram.
- Part of the tree is done, we will complete the rest of the tree.



- The probability of getting exactly 2 heads will be $\frac{\text{number of tosses with 2 heads}}{\text{number of possible outcomes}}$

EXAMPLE: Jody has 4 bottles of soda, 1 bottle of cola, 1 bottle of root beer, one bottle of ginger ale and 1 orange. She chooses 3 of the bottles to take to a party. If she chooses ginger ale what is the probability she chooses root beer too?

Hint: to calculate the probability we need to know the number of possible outcomes. Finish the tree diagram!



EXAMPLE: You want a sandwich and you have two choices of bread- wheat or Rye, 3 choices of cheese – Swiss, America, cheddar, and 2 choices of meat- ham or turkey. What is the probability of making a sandwich with ham?

Bread	Cheese	Meat	Outcomes
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W

R

- Based on the information above what is the probably of getting a sandwich made with American cheese?

EXAMPLE: What is the probability that a family with 3 children have 2 girls in any order?

First child	Second child	Third child	Outcomes
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G

B

- Based on the information above if you what is the probability of having 3 girls? 3 boys?