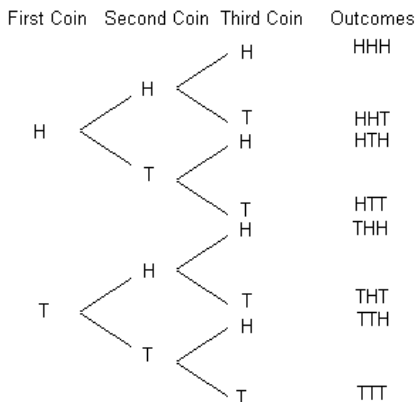


Probability of Compound Events

Match the words in the left column to its definition in the right column.

Probability	an outcome or a set of outcomes
Outcome	the likelihood of an event to occur
Experiment	an activity involving chance, such as rolling a die
Compound Event	the set of all possible outcomes in a probability experiment
Simple Event	an event consisting of two or more simple events
Sample Space	a possible result of a probability experiment

Creating a tree diagram is one way to display compound events to determine the probability of an event, such as flipping 3 coins and determining the likelihood of getting all heads.



What is the probability of getting all heads based on the above sample space? _____

Create a tree diagram of the different types of pizza that can be made. The choices are small or large, thick or thin crust, and choosing one topping of either pepperoni, sausage or cheese.

SIZE

CRUST

TOPPINGS

1. To win a carnival prize, you need to choose one of three doors labeled 1 through 3. Then you need to choose a red, yellow, or blue box behind each door. What is the probability that the prize is in the blue or yellow box behind door 2?

OUTCOMES	
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Door 1	Red box
Door 1	Yellow box
Door 1	Blue box
Door 2	Red box
Door 2	Yellow box
Door 2	Blue box
Door 3	Red box
Door 3	Yellow box
Door 3	Blue box

2. How many different outcomes are there when you flip a coin and spin a spinner numbered 1 - 8? _____

3. Mr. and Mrs. Smith are expecting triplets. Suppose the chance of each child being a boy is 50% and of being a girl is 50%. Draw the tree diagram that shows the sample space of all the possible outcomes.

CHILD 1

CHILD 2

CHILD 3

What is the probability that they will have at least one boy and one girl? _____