

### Creating a Sample Space

Sample Space- shows all possible outcomes for compound events.

ex) Rolling a die and flipping a coin  
 1, 2, 3, 4, 5, 6                      H, T

① Tree Diagram

② Organized List

1H, 1T, 2H, 2T, 3H, 3T, 4H, 4T, 5H, 5T, 6H, 6T      12 outcomes

③ Table \* Can only use if there's 2 events

	1	2	3	4	5	6	
H	x	x	x	x	x	x	12 outcomes
T	x	x	⊗	x	x	x	

### Sample Space practice

① Ice Cream Shop

Flavors	Served	Sprinkles
Chocolate	Cone	Rainbow
Vanilla	dish	Chocolate
Twist		

12 outcomes

CCR, CCC, CDR, CDC, VCR, VCC, VDR, VDC  
 TCR, TCC, TDR, TDC      12 outcomes

P(Chocolate & Chocolate Sprinkles)