

## Week 2 Probability Vocab.

### **Compound Probability:**

~ A compound event is an event that includes 2 or more simple events.

### **Independent Probability:**

~ when the outcome of one event **does not** impact the outcome of the second event, these events are called **independent**

~ Independent Probability can be determined by multiplying the probability of each event, or  $P(A \text{ and } B) = P(A) \bullet P(B)$

~ **Key Words:** replacing

~ Example: flipping a coin and it landing on heads, and rolling a die and it landing on 5. These 2 events are **independent**, they do not impact one another.

### **Dependent Events:**

~ when the outcome of one event **does** impact the outcome of the second event, these events are called **dependent**

~  $P(A \text{ and } B) = P(A) \bullet P(B \text{ after } A)$

~ **Key Words:** without replacement

~ Example: The captain of the football team is selected, then the co-captain is selected. These 2 events are **dependent**, they impact one another.

**Prime Number:** A whole number greater than 1 that has exactly 2 factors, itself and 1 **Example:** 5 is prime, its only factors are 1 and 5.

**Composite Number:** A number greater than 1 that has more than 2 whole-number factors **Example:** 6 is composite. Factors are 1 and 6, 2 and 3.

\*\* Other Notes: There are 52 cards in a deck. 26 are red and 26 are black. There are 13 in each suit: diamonds, spades, hearts, clubs.