Write the probability of each event. Probability can be written as a fraction, decimal, or percent. Always start with a fraction; the denominator is the total number of possible outcomes, and the numerator is the number of desired outcomes for the given event.

# of desired outcomes
───────────────────
total number of outcomes

When rolling a number cube:

1. P(4) =   2. P(odd) =   3. P(multiple of 3) =   4. P(prime) =

When picking a card from the deck:

5. P(red card) =   6. P(clubs) =   7. P(4) =   8. P(face card) =
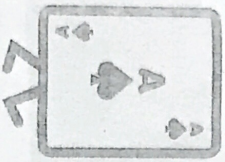
9. P(red 10) =   10. P(blue card) =   11. P(prime) =

When picking a marble from a bag of 3 white, 5 red, and 7 blue marbles:

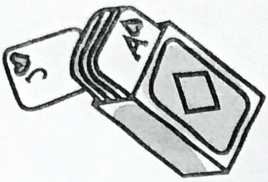12. P(white) =   13. P(red) =   14. P(green) =

Name _____

Date _____ Per _____

What's in a Deck of Cards?

1. How many cards are in a standard playing deck of cards? _____

2. How many suits are in a deck? _____

3. What are they? _____

4. How many cards are in each suit? _____

5. Which suits are black? _____

6. Which suits are red? _____

7. How many black cards are in a deck? _____

8. How many red cards are in a deck? _____

9. What are the "face cards"? _____

10. How many face cards are in a deck? _____

11. How many face cards are in each suit? _____

12. How many number cards are in each suit? _____

13. What is the probability of drawing a spade? _____

14. P(red Queen) = _____   15. P(purple) = _____

In a deck of cards, you have:

Clubs (Black): 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King, and Ace (13 cards)

Spades (Black): 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King, and Ace (13 cards)

Diamonds (Red): 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King, and Ace (13 cards)

Hearts (Red): 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King, and Ace (13 cards)