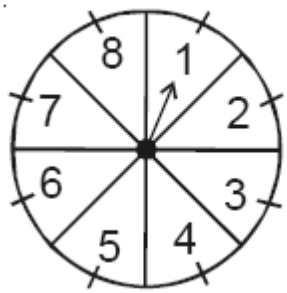
Name: _____

Classical Probability – Probability of an Event

1) A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8, and these are equally likely outcomes. What is the probability that it will point at:

   1) 8
   2) An odd number?
   3) A number greater than 2?
   4) A number less than 9?



2) A die is thrown once. Find the probability of getting:

   1) A prime number
   2) A number lying between 2 and 6
   3) An odd number.

3) One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting:

   1) a king of red color
   2) a face card
   3) a red face card
   4) the jack of hearts
   5) a spade
   6) the queen of diamonds

4) A lot of 20 bulbs contain 4 defective ones. One bulb is drawn at random from the lot. What is the probability that this bulb is defective?

5) 12 defective pens are accidentally mixed with 132 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.

6) A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears:

1) a two-digit number

2) a perfect square number

3) a number divisible by 5